Croco Rd
KSD984967547
1.5

RVWP
12-12-89

Croco Road Site
Shawnee County, Kansas

EPA Identification Number
KSD984967547

Preliminary Assessment and
Scanning Site Investigation

Kansas Department of Health and Environment
Bureau of Environmental Remediation
Pre-Remedial Section

October, 1989

Kansas Department of Health and Environment, Bureau of Environmental Remediation, Pre-Remedial Section

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TABLE OF CONTENTS

1.0 INTRODUCTION

The Kansas Department of Health and Environment (KDHE) has entered into a cooperative agreement with the Environmental Protection Agency (EPA) under which KDHE will perform investigations of selected contaminated sites in Kansas. The investigations are conducted in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), collectively known as "Superfund". The purpose of the investigations is to determine if sites qualify for listing on the National Priority List (NPL), thus making them eligible for federally mandated cleanups.

As part of the agreement, KDHE conducted a Preliminary Assessment (PA) and Scanning Site Investigation (SSI) of the Croco Road Site located near Topeka, Kansas. The investigation was initiated after volatile organic chemicals (VOCs) were detected in several private wells. The KDHE has advised residents not to drink the water and the City of Topeka has provided an alternate source of water.

The investigation included background research regarding the site history and a reconnaissance of the site. The site reconnaissance was conducted during August 10-16, 1989 and on October 25, 1989. It consisted of interviewing local residents and owners of businesses in the vicinity of the site and collecting groundwater, surface water, and soil samples. The information obtained from the background research and site reconnaissance is documented in this report.

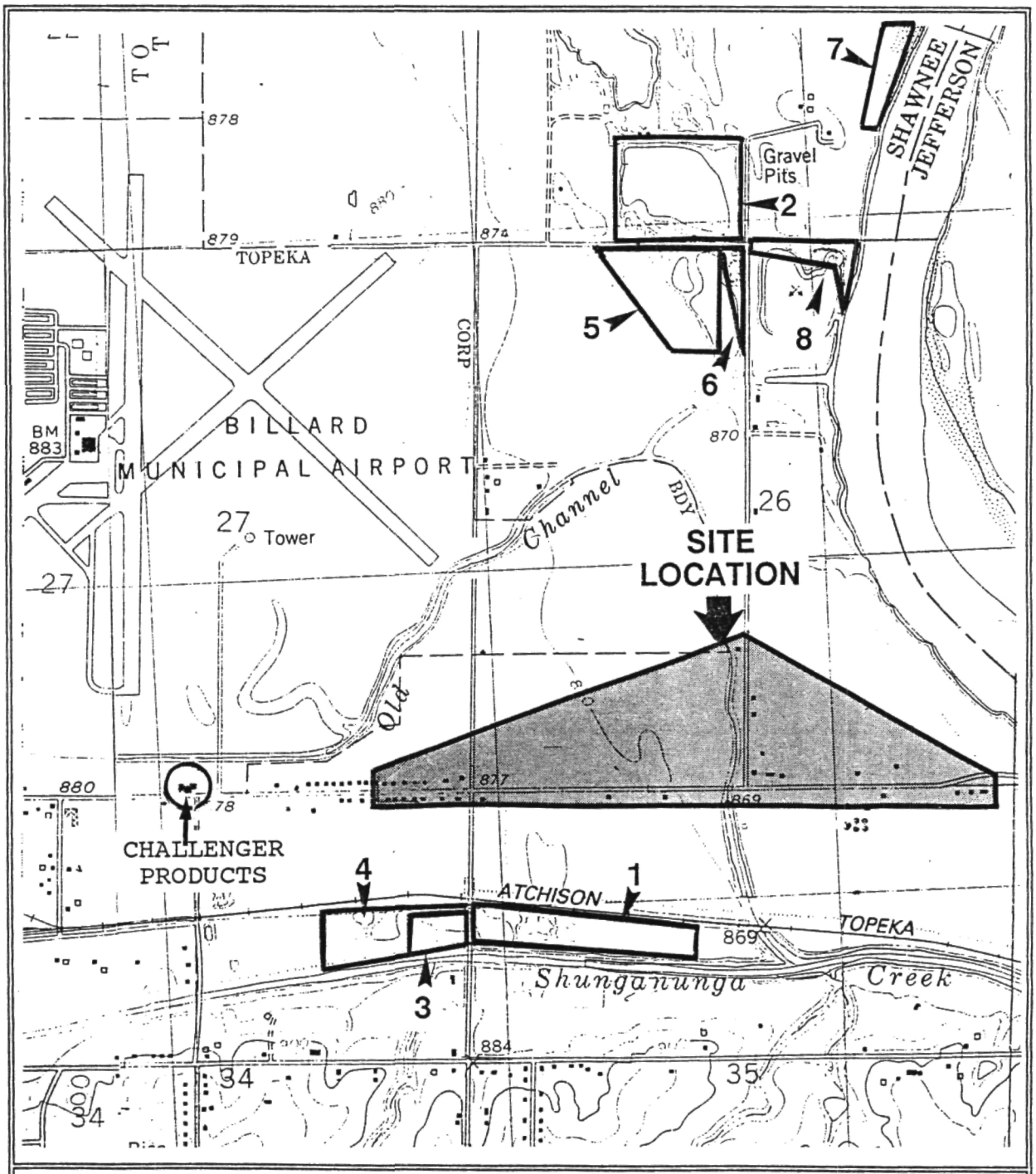

FIGURE 2 - SITE MAP

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE
OCTOBER 1989

Table 1
Landfill Property Owners

Landfill Number on Figure 1	Owner
1	Lee and Ruth Sweet
2	Albert Jackson
3	Ronald Frye
4	E.J. and Gwendolyn Ables
5	Donald and Norma Crump
6	Albert Jackson
7	Alberta Ferguson
8	Dallas Barnes

Source: Shawnee County property records and interviews with KDHE personnel.

2.3 Site History

In January 1987, the KDHE received a complaint from a resident in the vicinity of the site. The resident indicated that water from his well had a foul taste and odor. In response to the complaint the KDHE collected a sample from the well and analyzed it for VOCs. The KDHE also collected samples from several nearby private wells. Sample locations are shown in Figure 3.

The tests indicated that several private wells were contaminated with VOCs (Table 2). The primary VOCs detected were trichloroethylene and tetrachloroethylene. The levels detected in some private wells exceeded the current safe drinking water standards.[1] The levels detected ranged from 0.6 ug/l to 31.6 ug/l.[2]

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[1] In December, 1985 the KDHE issued the final draft of "Program Strategy Addressing Volatile Organic Chemicals (VOCs) in Kansas Groundwater". This document outlined, among other items, the maximum contaminant levels for VOCs in public water supply wells and the guidelines for enforcing these levels. The Kansas Action Level (KAL) is the maximum contaminant level set by the KDHE for public water supplies. All public water supplies in the state of Kansas are required to meet the KAL standards set by the KDHE. Public water supplies not meeting the KAL standards are required to notify their customers of the contamination and upon review by the KDHE, may be required to discontinue the use of the water source, blend water with other non-contaminated sources, treat the contaminated water, and/or supply an alternate source of water. In addition, the KALs are used as a guideline to advise private well owners on safe drinking water standards.

[2] The term ug/l is an abbreviation for micrograms per liter or parts per billion. Detecting 1.0 ug/l of a chemical in a water sample is approximately equivalent to detecting one drop of the chemical in 12,500 gallons of water.

2.0 BACKGROUND INFORMATION

2.1 Site Location

The Croco Road Site, EPA Identification Number KSD984967547, is located northeast of Topeka, Kansas in Shawnee County (Figure 1). The site is situated between the Phillip Billard Airport and the Kansas River. The airport is located on the northwest edge of the site and the Kansas River is less than 1/4 mile east. The legal description is the SW1/4 SE1/4 of Section 26, Township 11 South, Range 16 East and the SE1/4 SE1/4 SE1/4 of Section 27, Township 11 South, Range 16 East. Geographic coordinates are 39^0 04' 22" North latitude and 95^0 36' 39" West longitude.

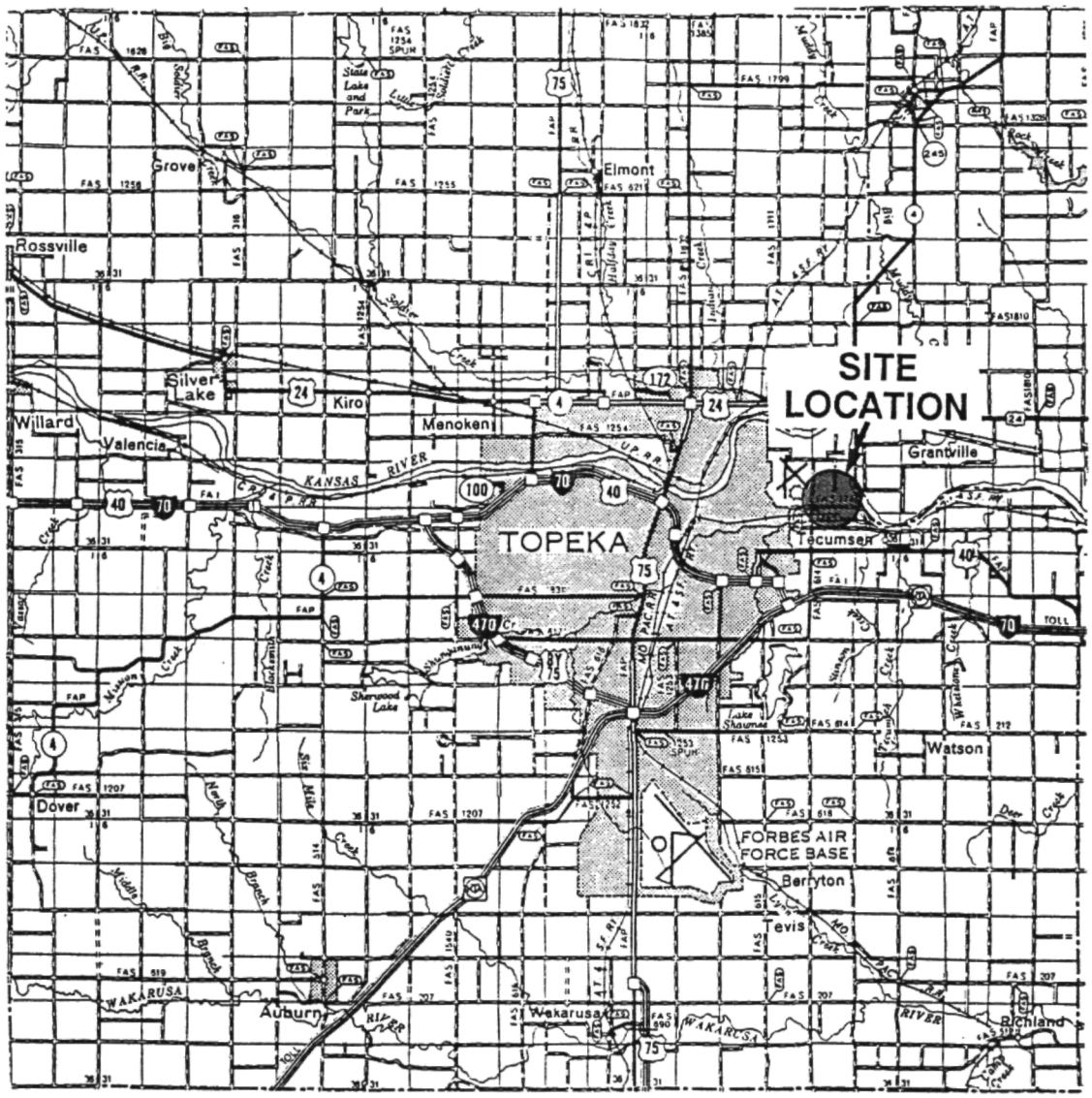
2.2 Site Description

The site covers approximately 147.5 acres and includes all areas where VOCs have been detected in the groundwater (Figure 2). The site is located in the Kansas River valley which is characteristically a broad low lying area with little slope.

Land within the site is zoned for single family residential or light and heavy industrial uses. Several landfills are located near the site (Figure 2). Of the eight landfills identified in Figure 2, six have been or are currently permitted by the state of Kansas to accept construction and/or demolition debris. Table 1 lists the owners of the landfills identified in Figure 2. (Topeka-Shawnee County Metro Planning, 1989).

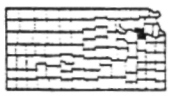
In addition to the landfills in the area, there is a chemical repackaging company located approximately one-half mile west of the site known as Challenger Products, Incorporated (Figure 2). The facility purchases chemicals in bulk quantities and repacks them into smaller quantities for resale. Challenger also manufactures a biodegradable sewer and drain cleaner.

Other facilities in the vicinity of the site include the Phillip Billard Airport, situated northwest of the site, the Santa Fe Airport Industrial Park located directly south of the site, and the Santa Fe Industrial Park located approximately one mile west of the site. Billard airport supports several small airplane maintenance facilities (Figure 2).



1 INCH = 4 MILE
SCALE

SHAWNEE COUNTY



LOCATION

FIGURE 1 - SITE LOCATION

SOURCE: STATE HIGHWAY COMMISSION OF KS. DEPT. OF P & D

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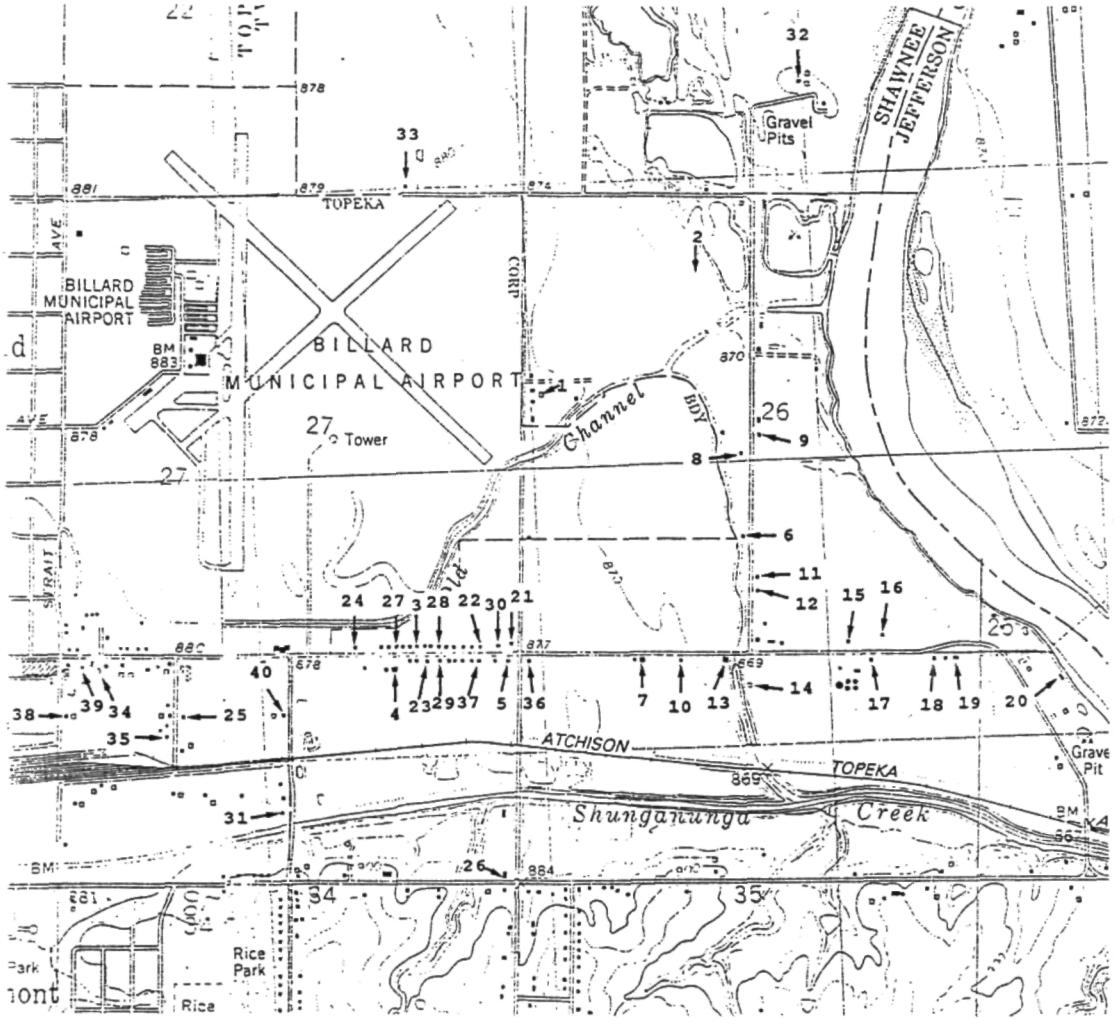
OCTOBER 1989



N

1 INCH = 2195 FEET
SCALE

FIGURE 3 - 1987 & 1988 SAMPLE LOCATIONS

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

Table 2
Analytical Data - Croco Road Site

WELL OWNER NAME	MAP ID	DATE SAMPLED	TCE 5.0*	DCE 70*	TCM 100*	PCE 7.0*	DCB 620*	TCA 200*	TOTAL VOCs
			(all measurements are in ug/l)						
Taylor	1	02/18/87	ND	ND	ND	ND	ND	ND	ND
Crump	2	03/10/87	ND	ND	0.7	ND	ND	ND	0.7
Price	3	02/18/87	ND	ND	ND	ND	ND	ND	ND
D. Schmidtlein	4	03/05/87	ND	ND	ND	ND	ND	ND	ND
Gerhardt	5	03/10/87	ND	ND	ND	3.4	ND	ND	3.4
Guilbault	6	03/10/87	1.9	ND	ND	ND	ND	ND	1.9
B. Schmidtlein	7	02/18/87	10.3	0.7	ND	ND	ND	ND	11.0
Slavens	8	03/10/87	ND	ND	ND	ND	ND	ND	ND
Topeka Storage	9	03/10/87	ND	ND	ND	ND	ND	ND	ND
Dahlman	10	03/05/87	14.4	1.0	ND	ND	ND	ND	15.4
King	11	02/17/87	2.6	0.8	ND	ND	ND	ND	3.4
Lewis	12	02/17/87	31.6	0.7	ND	12.8	ND	ND	45.1
Thompson	13	02/19/87	12.9	0.8	ND	ND	ND	ND	13.7
Rush	14	03/04/87	2.1	ND	ND	ND	ND	ND	2.1
Osborn	15	02/17/87	4.2	ND	ND	ND	ND	ND	4.2
Knauber	16	02/17/87	ND	ND	ND	ND	ND	ND	ND
Rohrman	17	02/17/87	ND	ND	ND	ND	ND	ND	ND
Bush	18	02/19/87	ND	ND	ND	ND	ND	ND	ND
Griffith	19	02/18/87	ND	ND	7.3	ND	ND	ND	7.3
Jones	20	11/05/86	ND	ND	ND	ND	ND	ND	ND
Allen	21	04/22/87	ND	ND	ND	ND	ND	ND	ND
Ieanno	22	04/22/87	1.0	ND	ND	ND	ND	ND	1.0
Hunt	23	04/22/87	ND	ND	ND	ND	ND	ND	ND
Hapman	24	04/22/87	ND	ND	ND	ND	ND	ND	ND
Schafer	25	04/22/87	ND	ND	ND	ND	ND	ND	ND
Gartner	26	04/22/87	ND	ND	ND	ND	ND	ND	ND
Price	27	02/18/87	ND	ND	ND	ND	2.0	ND	2.0
Cole	28	04/22/87	0.6	ND	ND	ND	ND	ND	0.6
Sasbery	29	04/30/87	ND	ND	ND	2.0	ND	1.2	3.2
Gish	30	04/30/87	2.3	ND	ND	ND	ND	ND	2.3
Busey	31	05/04/87	ND	ND	ND	ND	ND	ND	ND
Lessman	32	05/07/87	ND	ND	ND	ND	ND	ND	ND
Meir	33	05/07/87	ND	ND	ND	ND	ND	ND	ND
Stansburg	34	05/15/87	ND	ND	ND	ND	ND	ND	ND
Echols	35	05/12/87	ND	ND	1.4	ND	ND	ND	1.4
Hennessey	36	05/22/87	0.8	ND	ND	1.2	ND	ND	2.0
Reiding	37	05/22/87	0.6	ND	ND	ND	ND	ND	0.6
Bauer	38	06/29/87	ND	ND	ND	ND	ND	ND	ND
J. Schmidtlein	39	02/18/87	ND	ND	ND	ND	ND	ND	ND
Bigger	40	02/18/87	ND	ND	ND	ND	7.4	ND	7.4

TCE - Trichloroethylene
DCE - Cis and/or Trans 1,2 Dichloroethylene
TCM - Trichloromethane
PCE - Tetrachloroethylene
DCB - 1,2, and/or 1,4 Dichlorobenzene
TCA - 1,1,1 Trichloroethane
ND - Not detected above the detection limit
* - Kansas Action Levels (KALs)

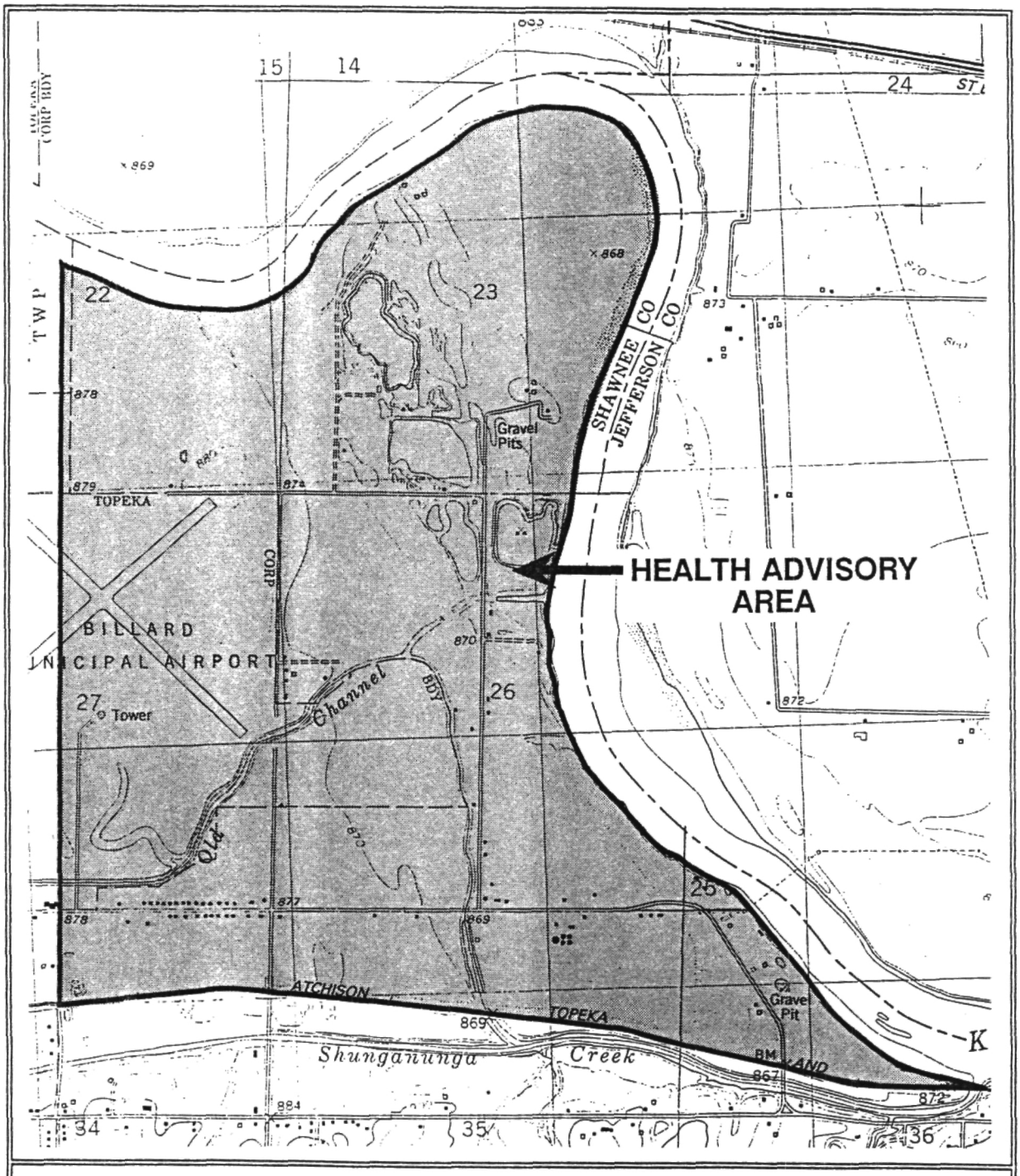
Initially, the KDHE recommended that private well owners whose wells were contaminated with VOCs not use the water and seek an alternate source of drinking and cooking water. However, on April 30, 1987 the KDHE issued a health advisory for all private well users in the vicinity of the site recommending that well water in the area not be used for human consumption. The advisory was issued for those residents in the area bordered by the Atchison, Topeka, and Santa Fe railroad on the south, the Kansas River on the north and east, and Rice Road on the west (Figure 4).

In February 1987, the KDHE initiated an investigation to determine potential sources for the contamination. In April 1987, several Resource Conservation and Recovery Act (RCRA) hazardous waste compliance inspections were conducted by the KDHE at facilities in the vicinity of the site. This included facilities located at the Phillip Billard Airport and Challenger Products, Incorporated.

The facilities located at the airport included the Metropolitan Topeka Airport Authority (MTAA) maintenance shop, Topeka Police Helicopter maintenance shop, Hetrick Airplane Maintenance, Topeka Aircraft Sales and Service, and R & B Aircraft. The inspections revealed that all of these facilities generated waste Stoddard solvent and/or acetone in quantities ranging from one gallon to 10 gallons per month. Disposal of the wastes was generally by mixing with waste oil and/or evaporation.

The RCRA inspection conducted at Challenger Products revealed that the facility discharged all of its sewage and chemical waste to its septic tank. During the inspection, it was noted that there were numerous 55 gallon drums and 5 gallon containers of unknown contents stored behind the facility. The inspection report indicated that current chemical handling practices could lead to spillage. The facility operators were directed by the KDHE to discontinue disposing of chemicals in its septic system and to identify the contents of all drums and containers.

Due to the findings during the RCRA inspection conducted at Challenger Products, the KDHE tested waste samples from the facility's septic tank. The samples were collected on May 13, 1987 and September 1, 1987. The results are presented in Table 3.



1 INCH = 2012 FEET
SCALE

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FIGURE 4 - HEALTH ADVISORY MAP

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

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OCTOBER 1989

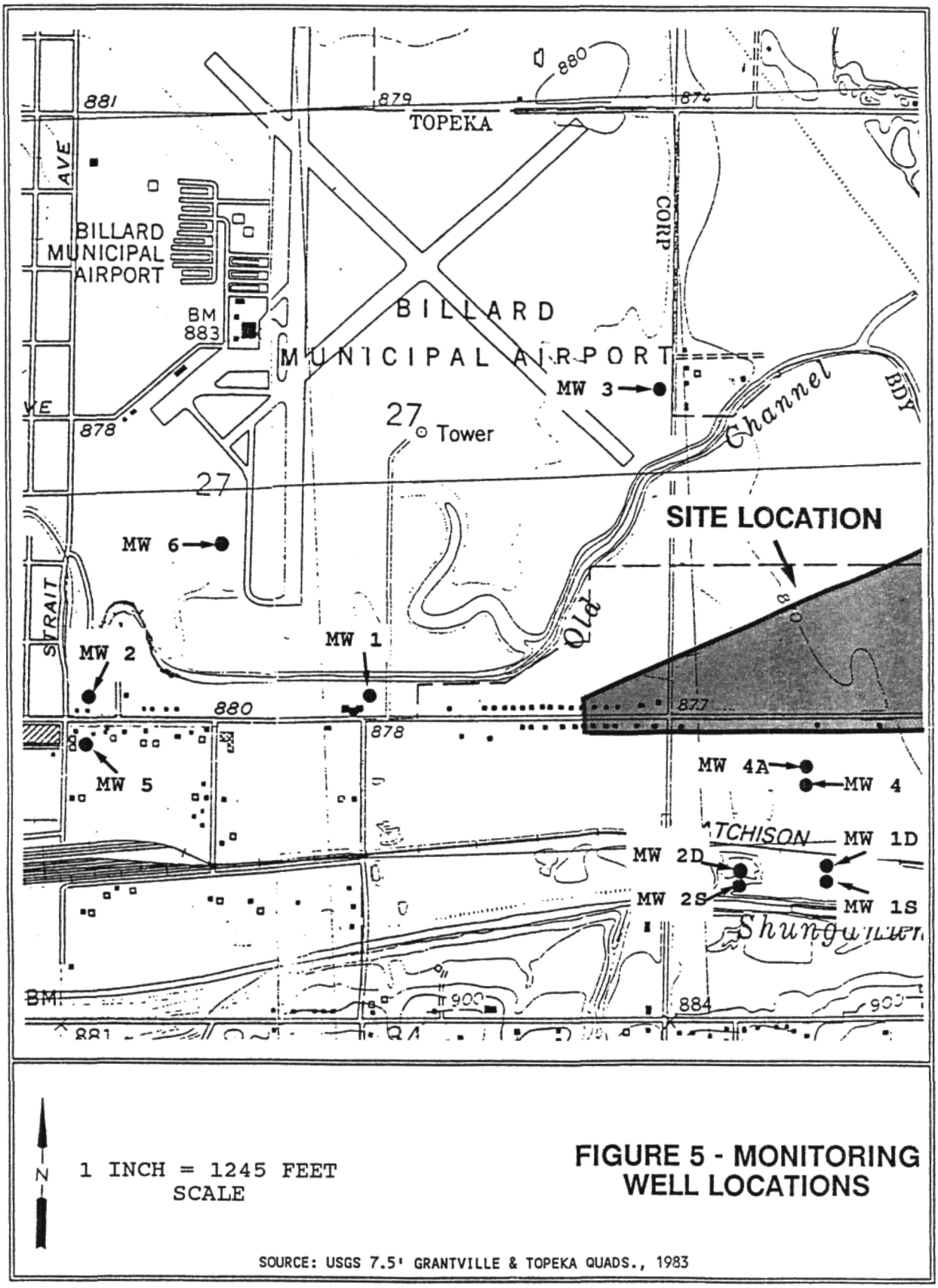
TABLE 3
Challenger Products, Inc.
Septic Tank Analytical Results

VOC	Date 05/13/87 (ug/l)	09/01/87 (ug/l)
Dichloromethane	ND	4,180.0
1,1-Dichloroethylene	ND	3.6
1,1-Dichloroethane	1.0	15.5
1,2-Dichloroethylene	0.5	14.4
Trichloromethane	17.5	9.8
Trichloroethylene	8.4	155.0
Benzene	ND	17.7
Tetrachloroethylene	492.0	2,875.0
Toluene	29.3	35.8
Chlorobenzene	1.9	383.0
Ethylbenzene	119.0	37.9
Meta-xylene	251.0	82.6
Ortho and/or Para-Xylene	202.0	67.7
1,2 &/or 1,4-Dichlorobenzene	ND	28.4

Due to the contamination detected in nearby private wells, an investigation of the Champney landfills also was conducted in 1987. The landfill currently being operated by Mr. Champney (Landfill Number 1 on Figure 2) and the landfill formerly owned and operated by Mr. Champney (Landfill Number 3 on Figure 2) are located approximately one quarter of a mile south of the site. Both landfills have been permitted to accept demolition debris (Kansas Solid Waste Disposal Permit Numbers 176 and 350).

On March 6, 1987, the KDHE directed Mr. Champney to conduct a groundwater monitoring program in areas covered by Permit Numbers 176 and 350. In April and May 1988, Mr. Champney installed four monitoring wells at the landfill (Figure 5). Two of the wells were drilled and completed in the unconsolidated zone (Well Identification Numbers: MW 1S and MW 2S) and two were completed at bedrock (Well Identification Numbers: MW 1D and MW 2D). VOC analyses indicated that MW 1D contained 0.7 ug/l of benzene. VOCs were not detected in any other monitoring wells installed on Mr. Champney's property.

On April 23, 1987, the KDHE investigated a report of illegal



1 INCH = 1245 FEET
SCALE

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FIGURE 5 - MONITORING WELL LOCATIONS

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE
OCTOBER 1989

disposal of oil at the Champney landfill. The investigation revealed that Mr. Champney had authorized the disposal into the landfill of 4,000 gallons of an oil and water mixture from Capital City Oil Company. The KDHE directed Mr. Champney to recover the oil and remove all contaminated soils. In addition, the KDHE sampled and tested the oil and soils. The results revealed low levels of hydrocarbons; however, the levels were not high enough to classify the waste as hazardous. Based on the analyses, Mr. Champney was given authorization to dispose of the contaminated soils at the Shawnee County landfill. As a result of the illegal disposal, Mr. Champney was fined $250.00.

The KDHE has also installed seven monitoring wells in the investigation area (Figure 5). Monitoring wells MW 1, MW 2, MW 3, MW 5, and MW 6 were all completed at bedrock. Monitoring wells MW 4 and MW 4A were completed in the shallow unconsolidated zone. VOC analyses indicated low levels of VOCs in some of the monitoring wells (Table 4).

Based on the data collected from the 1987-1988 investigation, the KDHE recommended that a Superfund investigation be conducted. The remainder of this report summarizes the results of that investigation.

TABLE 4
1987-1988 Monitoring Well Analytical Data
(all measurements are in ug/l)

Well Number	Date Sampled	DCM	THM	TOLUENE	M-XYLENE	BENZENE	TCE	1,2 DCA	1,2 DCB	TOTAL VOCS
					(all measurements are in ug/l)					
MW1	08/11/87	1.1	5.7	0.8	1.1	ND	ND	ND	ND	8.7
MW1	08/18/87	ND	ND	ND	0.8	ND	ND	ND	ND	0.8
MW1S	06/02/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW1D	06/02/88	ND	ND	ND	ND	0.7	ND	ND	ND	0.7
MW2	08/11/87	1.4	79.6	ND	ND	ND	ND	ND	ND	81.0
MW2	08/18/87	ND	39.9	0.6	ND	ND	ND	ND	ND	40.5
MW2S	06/02/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW2D	06/02/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW3	08/18/87	ND	64.8	0.6	0.7	ND	ND	ND	ND	66.1
MW4	01/20/88	ND	ND	0.9	ND	ND	0.8	ND	ND	1.7
MW4A	01/20/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW5	08/02/88	ND	ND	ND	ND	ND	ND	0.8	2.3	3.1
MW6	08/02/88	ND	ND	1.5	ND	ND	ND	ND	ND	1.5

DCM - Dichloromethane
THM - Trihalomethanes
M-XYLENE - Meta-Xylene
TCE - Trichloroethylene
1,2 DCA - 1,2-Dichloroethane
1,2 DCB - 1,2-Dichlorobenzene
ND - Not detected above detection limit

3.0 HAZARDOUS SUBSTANCES CHARACTERISTICS

The hazardous substances detected at this site are classified as volatile organic chemicals or VOCs. Toxicological studies have indicated that long term exposure to excessive levels of some VOCs may cause cancer and other health problems.

Seven VOCs have been detected in the groundwater. The primary contaminants detected are trichloroethylene and tetrachloroethylene. Listed in Table 5 are all VOCs detected at the site. A brief description of each constituent is provided below.

TABLE 5
Summary of VOCs Detected

VOC	Common Abbreviation
Trichloroethylene	TCE
Tetrachloroethylene	PCE
Trans and/or Cis 1,2-Dichloroethylene	1,2 DCE
Trichloromethane	
1,2-Dichloroethane	1,2 DCA
1,1,1-Trichloroethane	1,1,1 TCA
1,2 and/or 1,4-Dichlorobenzene	DCB

3.1 Trichloroethylene

Trichloroethylene (TCE), CAS #79-01-6, is a nonflammable, low viscosity liquid that is slightly soluble in water. It is heavier than water and will naturally migrate towards the bottom of an aquifer. When exposed to air or sunlight it readily volatizes and degrades. It binds easily with soils and therefore will move slowly through the subsurface until it reaches groundwater, where it is more mobile.

TCE may be a degradation product of tetrachloroethylene and is commonly used as a solvent for fats, waxes, resins, oils, rubber, paints, and varnishes. It is also used for degreasing, and in the manufacture of organic chemicals and pharmaceuticals. The KAL for TCE is 5.0 ug/l.

3.2 Tetrachloroethylene

Tetrachloroethylene (PCE), CAS #127-18-4, also known as perchloroethylene and Perc, is a nonflammable solvent. It is heavier than water, volatizes readily in the air, and can be degraded by both microbial activity and sunlight. Since it is heavier than water, PCE has a tendency to migrate downward through the soil and groundwater. It binds easily with soils and therefore the migration period can extend from years to decades depending upon the soil and subsurface properties.

The degradation of PCE in the groundwater may form other VOCs; however, this process is generally slow. Degradation products include trichloroethylene, dichloroethylene, and vinyl chloride. Tetrachloroethylene is commonly used as a dry cleaning solvent; a vapor-degreasing solvent; and as a drying agent for metals and other solids. The KAL for PCE is 7.0 ug/l.

3.3 Trans and/or Cis 1,2-Dichloroethylene

Trans and/or cis 1,2-dichloroethylene (1,2 DCE), CAS #156-60-5, is a flammable solvent which is slightly soluble in water. It also is slightly heavier than water and decomposes slowly when exposed to air, light, and moisture.

1,2 DCE may be a degradation product of PCE and is commonly used as a general solvent for organic materials, dye extractions, perfumes, lacquers, and organic synthesis. The KAL for 1,2 DCE is 70 ug/l.

3.4 Trichloromethane

Trichloromethane, CAS #67663, also known as chloroform, is a nonflammable solvent that is heavier than water. Trichloromethane can be formed from the degradation of tetrachloromethane. It is one of a group of VOCs known as trihalomethanes. Trihalomethanes are the most commonly found VOCs in public drinking water supplies. They are often formed during the chlorination of drinking water supplies.

Trichloromethane also is widely used by the lacquer industry. Among other commercially produced items, it is used in the manufacture of pharmaceuticals, floor polishes, and fluorocarbons. The KAL for trichloromethane and total trihalomethanes is 100.0 ug/l.

3.5 1,2-Dichloroethane

1,2-Dichloroethane (1,2 DCA), CAS #107-06-2, also known as ethylene dichloride, is a common solvent which is slightly soluble in water, is heavier than water, and is resistant to oxidation.

1,2 DCA is used as a lead scavenger in gasoline; an agent in the manufacture of organic chemicals; a paint remover; and a constituent of varnish and finish removers, grain fumigants and metal degreasers. It was commonly used as a constituent in grain fumigants; however, due to its toxicity, its use in this manner was banned on December 31, 1985 by the EPA. The KAL for 1,2 DCA is 5.0 ug/l.

3.6 1,1,1-Trichloroethane

1,1,1-Trichloroethane (1,1,1 TCA), CAS #71-55-6, also known as methyl chloroform, is a nonflammable solvent. It is used as a degreaser, a dry-cleaning agent, and a propellant. In addition, it is widely used as a substitute for carbon tetrachloride, which was banned by the EPA in 1985. The KAL for 1,1,1 TCA is 200 ug/l.

3.7 1,2 and/or 1,4-Dichlorobenzene

1,2 and/or 1,4-Dichlorobenzene (DCB), CAS #95-50-1 and #106-46-7, are solvents which are commonly used as intermediates in the formation of dyestuffs, herbicides, degreasers, and as air deodorants and insecticides. The KAL for 1,2-dichlorobenzene is 620 ug/l and for 1,4-dichlorobenzene it is 75 ug/l.

4.0 PHYSICAL AND DEMOGRAPHIC CHARACTERISTICS

4.1 Target Population

For Superfund scoring purposes the target population includes: (1) those persons using the groundwater for either drinking water or irrigation within a four mile radius of the site, and (2) the number of persons using surface water for either drinking water supply or irrigation within 15 miles downstream of the site.

The target population totals approximately 9,489 people (Table 6). Drinking water supplies account for 6,718 of the target population and irrigation accounts for 2,771.

There are no permitted surface water diversions within 15 miles downstream; therefore, no target population is attributed to surface water use.

TABLE 6
Target Population

Source - Groundwater	Approximate Number of Persons Served
Drinking Water Supplies	
Private Wells (Rural)	76
Shawnee Co. RWD #3	3,583
Jefferson Co. RWD #1	2,782
Jefferson Co. RWD #15	277
Irrigation	
Acres Irrigated	1,847
TOTAL TARGET POPULATION	9,489

Sources: Kansas Water Database, Jefferson County RWDs #1 and #15, Shawnee Co. RWD #3, and USGS Topo Map, Topeka, Ks Quad..

4.2 Climate

Shawnee County has a typical continental climate with warm to hot summers and cold winters. At Topeka, temperatures range from 25° F below zero to 114° F and average about 54.1° F. Generally, the average daily maximum temperature is 90.1° F, occurring in July; the minimum daily temperature is 19.2° F, occurring in January.

The average yearly rainfall is 33.83 inches with 19.07 inches being the yearly minimum and 48.60 inches the maximum. The Gulf of Mexico is the principal source of moisture for the midcontinent region (Soil Conservation Service, 1970).

4.3 Land Use

Although much of Shawnee County is dedicated to farming it includes Topeka, the state capitol, which is the third largest city in Kansas. Topeka also supports numerous major industries.

The site is located in the Kansas River Valley. Major land use in the vicinity of the site includes agriculture, residential, and light industry. The Phillip Billard Airport, located northwest of the site, supports several small aircraft maintenance facilities. In addition, the area has numerous permitted and unpermitted construction/demolition landfills.

4.4 Topography and Drainage

The northern part of Shawnee County is in the Dissected Till Plains section, and the southern part is in the Osage Plains section of the Central Lowlands physiographic province. The major topographic features are the east trending valleys of the Kansas and Wakarusa Rivers. North of the Kansas River, in the glaciated part of the county, the topography is more subdued than that south of the river (Soil Conservation Service, 1970).

The site is located on the floodplain of the Kansas River. Shunganunga Creek is located south of the site and drains east into the Kansas River. The site, slopes slightly to the east-northeast toward the Kansas River.

4.5 Soils

Soils found in the vicinity of the site are generally of the Eudora-Muir association (Soils Conservation Service, 1970). These soils are characteristically well drained, have a loam

to silty clay loam subsoil, and are typically located on benches in the Kansas River valley (Soil Conservation Service, 1970).

Soils within the site boundary are predominantly of the Eudora Series (Figure 6). They are typically neutral to moderately alkaline, are well drained, and are formed in coarse silt loam or loam alluvium. These soils cover approximately 6.2 percent of Shawnee county and are typically located along the benches of the Kansas River (Soil Conservation Service, 1970).

4.6 Surface Water

Major surface water routes in the vicinity of the site include the Kansas River and Shunganunga Creek (Figure 7). The Kansas River is one of the largest flowing rivers in Kansas. It is located north and east of the site and flows in a southerly and easterly direction. The river provides drinking water to the cities of Topeka, Lawrence, and Kansas City. Shunganunga Creek, located south of the site, is a tributary of the Kansas River. It flows east into the Kansas River.

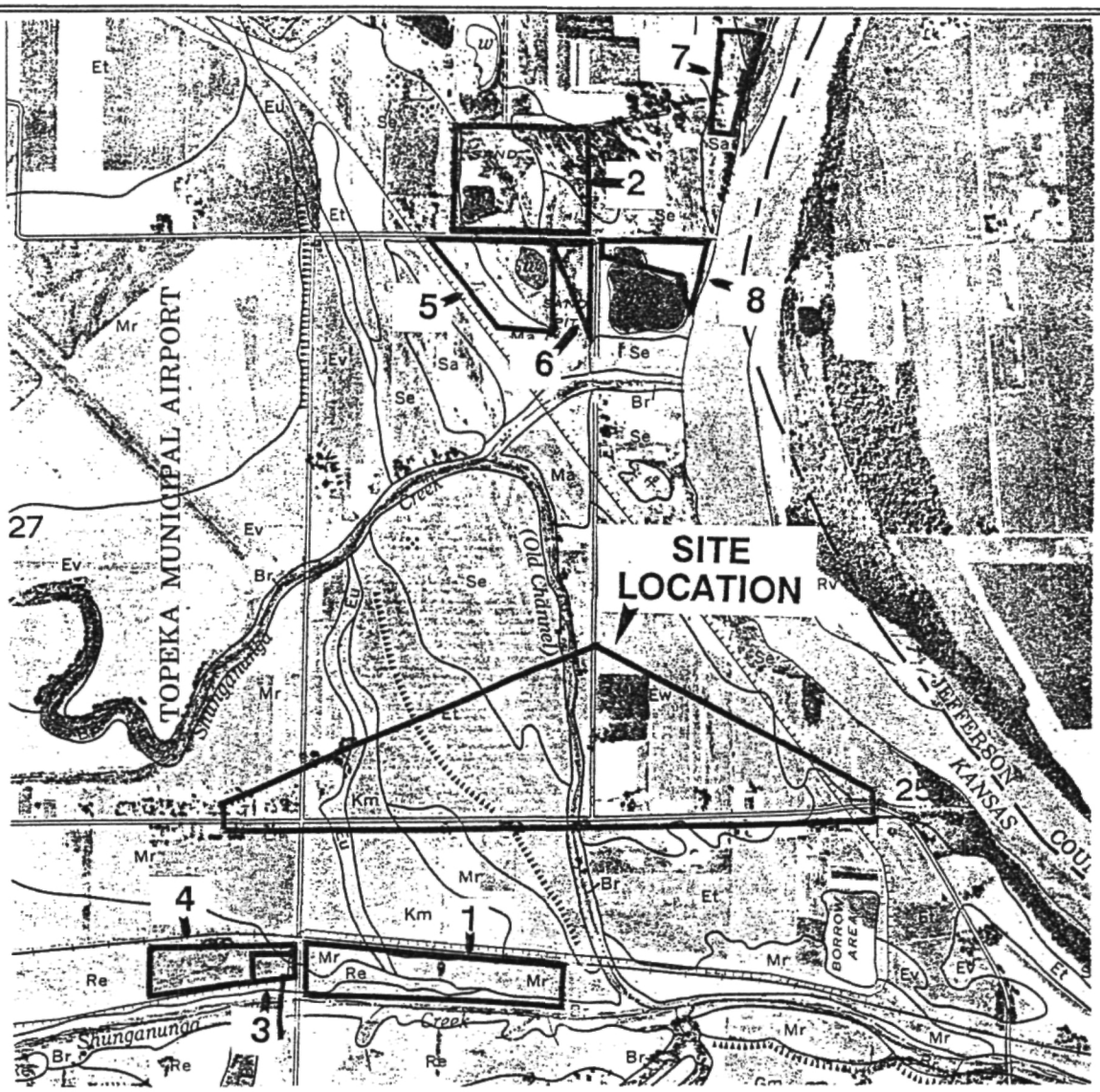
No above ground wastes were found at the site, therefore there is no known potential for overland migration into surface water. However, surface water and groundwater are closely interdependent at the site, and contaminant transfer between the groundwater and surface water is possible.

4.7 Geology and Hydrogeology

The geology of the site primarily consists of Kansas River valley alluvium and terrace deposits (Figure 8). Bedrock is predominantly shale ranging in age from Pennsylvanian to Permian.

The principal water bearing unit is the alluvium deposits which consist of sand and gravel. These deposits are a good source of water and are generally coarser towards the bottom of the unit. The terrace deposits are known as the Newman terrace deposits and are similar to the alluvial deposits in that they also consist of sand and gravel. The alluvial deposits typically occur from the river to the first terrace and the Newman terrace deposits typically occur along the terraces (Fader, 1974). Groundwater depth is approximately 20 feet and saturated thickness ranges from more than 40 feet west and north of the site, to 20 to 40 feet within the site boundaries (Fader, 1974).

Lithologic logs of monitoring wells in the vicinity of the site indicate that silty clay occurs from zero to



SOIL TYPES

Br = Broken alluvial land
Et = Eudora silt loam
Eu = Eudora soils
Ev = Eudora-Kimo complex
Ew = Eudora-Kimo complex
Km = Kimo silty clay loam
Ma = Made land
Mr = Muir silt loam
Re = Reading silty clay loam
Rv = Riversash
Sa = Sarpy sand
Se = Sarpy-Eudora complex

N

1 INCH = 1,667 FEET

SCALE

FIGURE 6 - SOILS MAP

LEGEND
1-8 = Landfill Locations

SOURCE: SOIL SURVEY SHAWNEE COUNTY KANSAS, USDA SCS

KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE
OCTOBER 1989

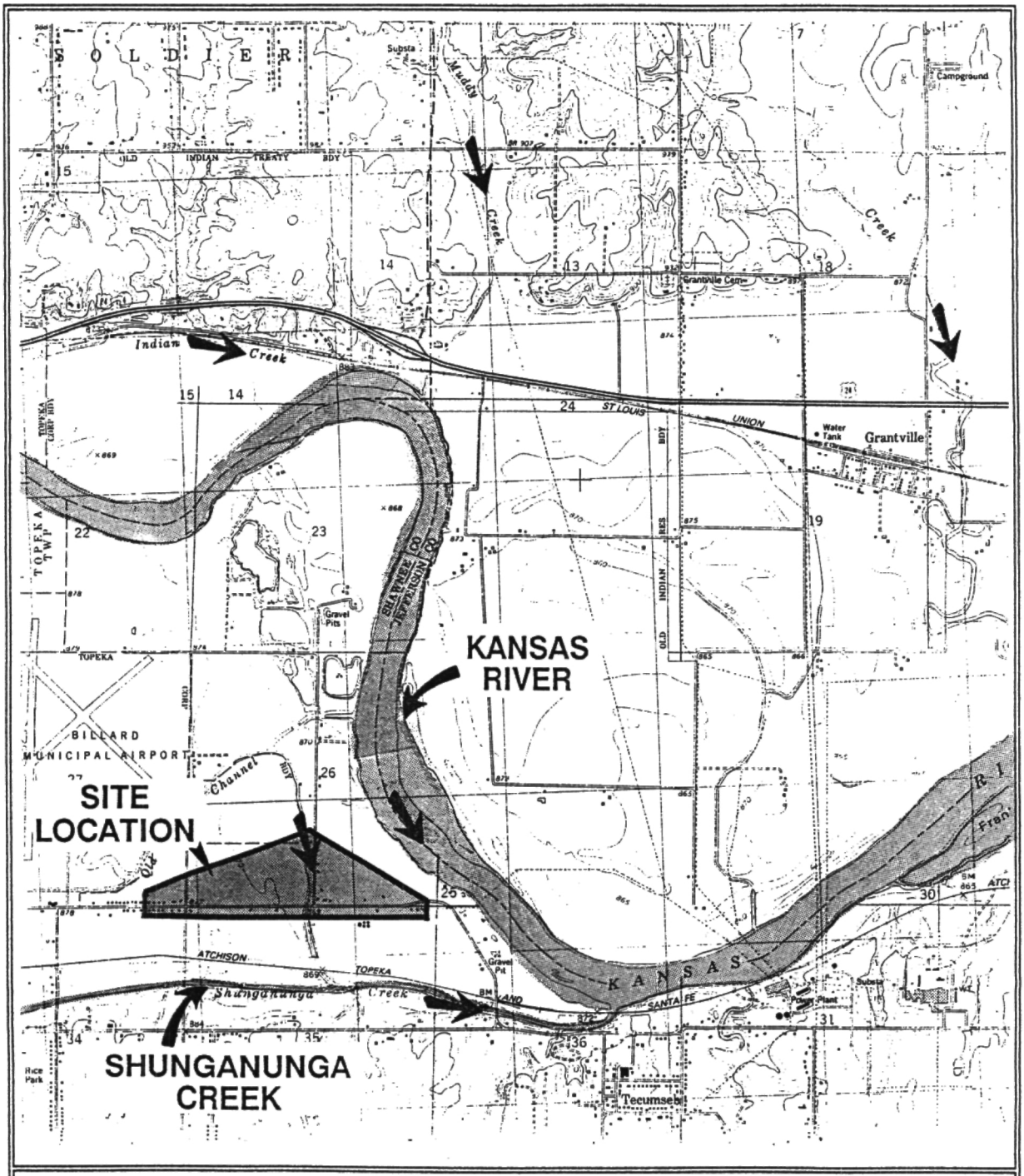


FIGURE 7 - SURFACE WATER MAP

SOURCE: USGS 7.5' GRANTVILLE QUAD., 1983

KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE
OCTOBER 1989

5.0 POTENTIAL SOURCES

No sources were identified, but the potential source areas include several industries, landfills, and residential septic systems. Some of the potential sources are described below.

5.1 Challenger Products, Inc.

Challenger Products, is located approximately one-half mile west of the site at 3500 Northeast Seward Road (Figure 9).

In May 1982, a RCRA inspection was conducted at the facility by the KDHE. The inspection revealed that Challenger manufactured a biodegradable sewer, drain, and septic tank cleaner. The facility did not generate hazardous waste, and was exempt from all regulations regarding hazardous waste.

In April 1987, the KDHE conducted a RCRA inspection. This inspection was initiated after contamination was detected in several private wells in the vicinity of Challenger. The inspection revealed that Challenger still manufactured the biodegradable cleaner. In addition, Challenger also purchased chemicals in bulk quantities and repackaged them into smaller quantities for resale. The inspection report indicated that Challenger was discharging all sewage and laboratory wastes into its septic tank. The KDHE tested the contents of the septic tank and found numerous VOCs, including tetrachloroethylene and trichloroethylene, which are the main VOCs detected in nearby private wells. The KDHE ordered the facility to discontinue this method of disposal.

In August 1987, the KDHE drilled a monitoring well east of the facility. The well was drilled to bedrock and tested for VOCs. The results revealed very low levels of toluene and meta-xylene. The well was resampled during the 1989 site reconnaissance and composite soil samples were collected near the septic tank and along the septic tank laterals. No VOCs were detected in either the soil samples or the monitoring well; however, the septic tank samples contained numerous VOCs, including trichloroethylene and tetrachloroethylene.

5.2 Ables Demolition Landfill

Located south of the site, this landfill was initially issued a permit to accept demolition debris on May 7, 1976 (Permit Number 172) (Figure 9). The permit expired on June 30, 1989. The property is owned and operated by E.J. and Gwendolyn Ables.

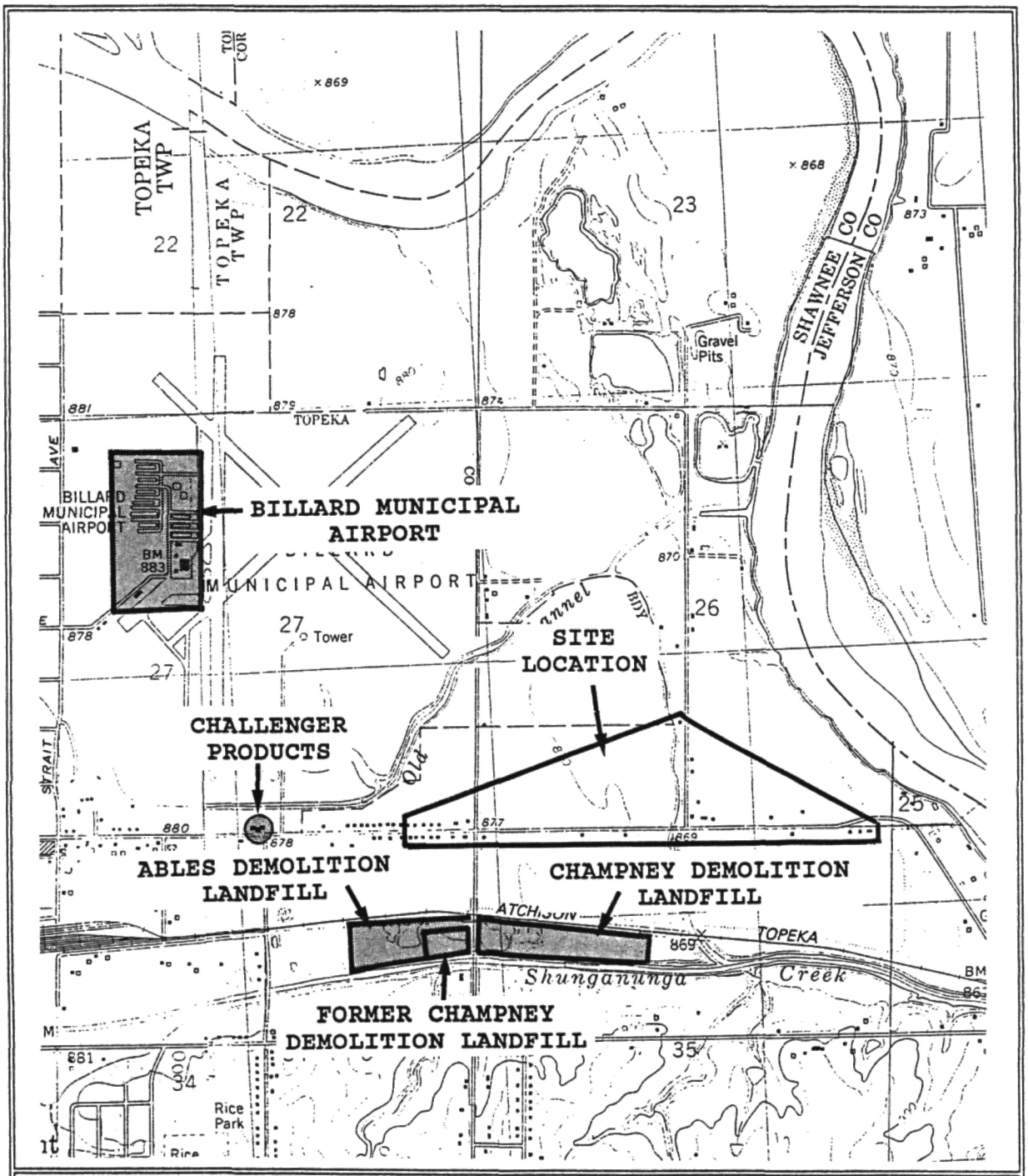


FIGURE 9 - POTENTIAL SOURCE MAP

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

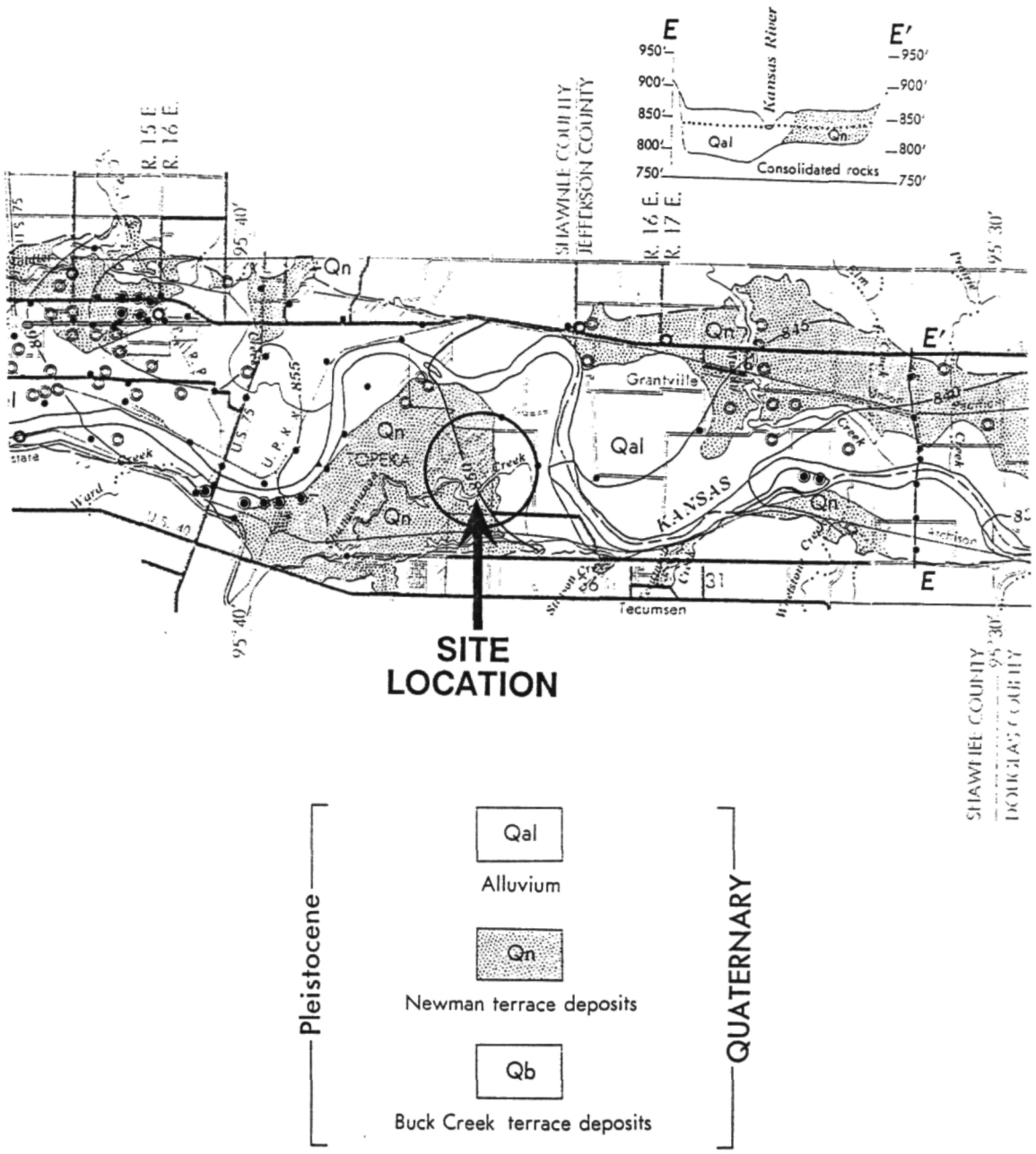


FIGURE 8 - GEOLOGICAL MAP

SOURCE: KGS BULLETIN 206, PART 2, 1974

approximately 30 feet; fine to coarse sands from approximately 30 to 60 feet; gravel from approximately 60 to 65 feet; and bedrock consisting of shale and/or limestone at 65 to 70 feet. Bedrock slopes in a east-southeast direction (Fader, 1974); however, local groundwater flow is towards the river in an east-northeast direction.

5.3 Champney Demolition Landfills

George Champney has owned and operated two landfills located south of the site at 313 Croco Road and 314 Croco Road (Figure 9). Both sites were permitted for disposal of demolition debris. The "Former Champney Landfill" was initially permitted on May 7, 1976 (Permit Number 176). However this landfill has been officially closed and is currently used to store bricks. The demolition landfill currently being operated by Mr. Champney was initially permitted on October 26, 1979 (permit Number 350).

Mr. Ronald Frye owns the area identified as "Former Champney Demolition Landfill" on Figure 9. Mr. and Mrs. Lee and Ruth Sweet recently purchased the property currently being operated by Mr. Champney and identified as "Champney Demolition Landfill" on Figure 9.

Due to the contamination detected in nearby private wells, in 1987 the KDHE directed Mr. Champney to conduct a groundwater monitoring program. In 1988, Mr. Champney installed four monitoring wells on his property. Analyses of samples collected from the wells in 1988 and 1989 revealed no significant levels of VOCs.

5.4 Billard Airport

Numerous small maintenance facilities are located at Billard Airport (Figure 9). As discussed in the site history section of this report, all use or have used Stoddard Solvent and/or Acetone in the air processes. Businesses which are no longer located at the airport could also be considered potential sources.

5.5 Other Potential Sources

Although not depicted on Figure 9 all residents and businesses in the area use septic tanks for waste disposal. Hazardous substances discharged into septic tanks could adversely affect the groundwater as a result of septic tank leaks or discharge from lateral lines.

During the site reconnaissance, an interview was conducted with Mr. Art Hase, a retired Billard Airport maintenance operator. Mr. Hase indicated that a landfill was located at the southern end of the north-south runway at Billard Airport from approximately 1950 to 1970. This alleged landfill was used for the disposal of materials from facilities located at the airport (Hase, 1989).

6.0 FIELD ACTIVITIES AND ANALYTICAL RESULTS

6.1 Introduction

Field activities were conducted during August 10-16, 1989 and on October 25, 1989. Field activities included the collection of waste samples, soil samples, groundwater samples, surface water samples and tours of several businesses in the area. A total of 54 samples were collected during field activities (Table 7). Appendix 1 includes copies of all analytical data.

TABLE 7
Summary of Samples Collected and Analyzed for VOCs During the 1989 Site Reconnaissance

Sample Media	Total Samples
Groundwater	38
Surface water	5
Soils	9
Waste	2
TOTAL	54

6.2 Groundwater Samples

Groundwater samples were collected from twenty eight different locations in the vicinity of the site (Figure 10). Samples were collected from wells that are located both downgradient and upgradient of the site. Each of the samples were analyzed for VOCs. In addition, some of the samples were analyzed for base neutrals and acid extractables.

No significant levels of base neutral or acid extractables were detected; however, VOCs were detected in four of the thirty eight groundwater samples at levels ranging from 1.0 ug/l to 60.0 ug/l (Table 8). The levels of trichloroethylene and tetrachloroethylene detected in two of the wells (Figure 10 Identification Numbers: T11 and T12) exceeded Kansas drinking water standards.

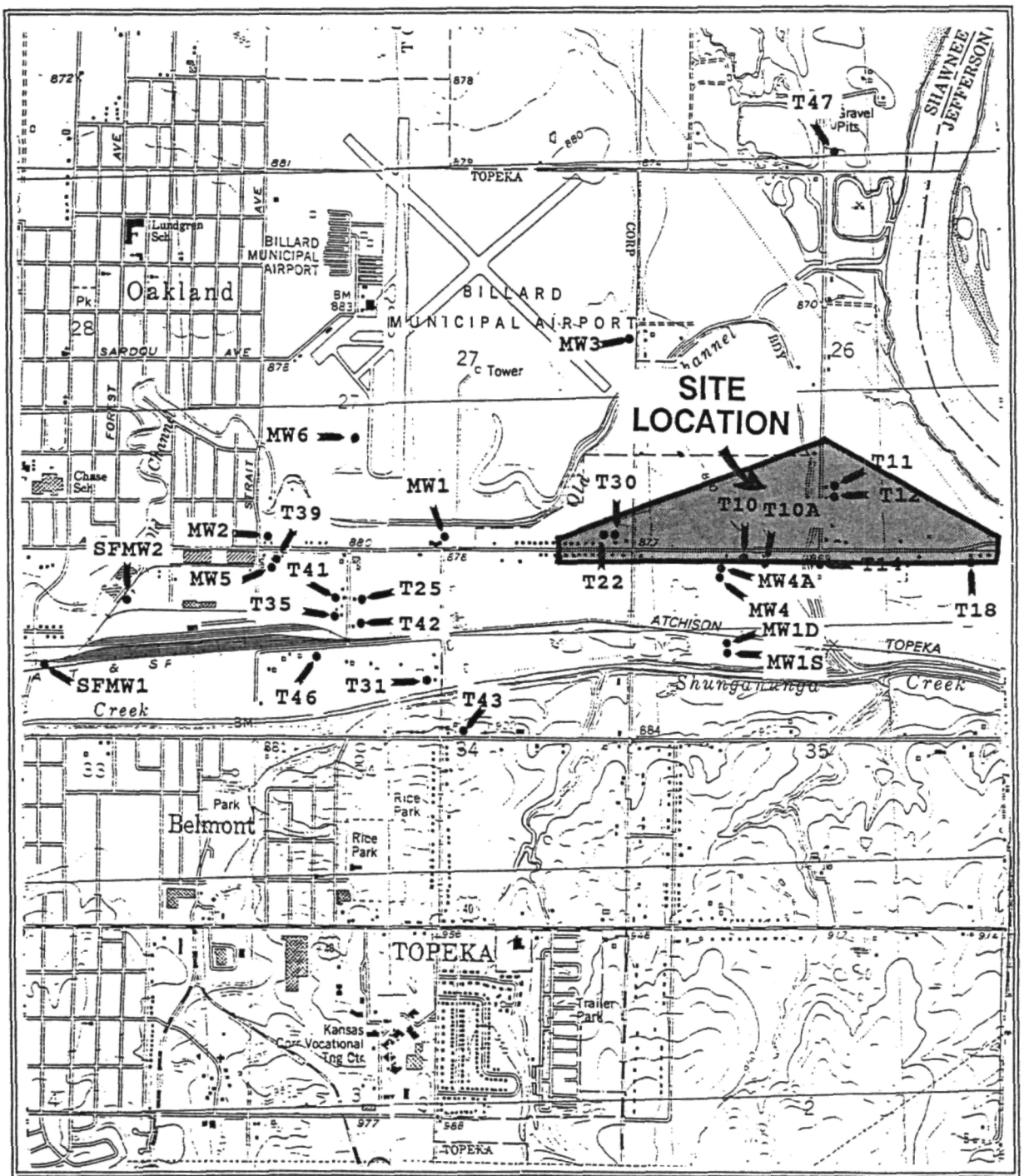


FIGURE 10 - GROUND WATER SAMPLE LOCATIONS

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE
OCTOBER 1989

Dimethyl disulfide, which was detected in the sample collected from location T43, is commonly found in water that has been contaminated with feedlot runoff or septic system leakage. The source for the acetone contamination is unknown; however, acetone is a common degreasing solvent. Although not listed in Table 8, several of the monitoring well samples showed low levels of methylene chloride. This type of contamination is commonly associated with laboratory contamination. Laboratories use methylene chloride to decontaminate equipment.

Table 8
1989 Groundwater Analytical Data
Croco Road Site

WELL OWNER NAME	MAP ID	DATE	TCE 5.0*	PCE 7.0*	ACETN None*	DMDS None*	TOTAL VOCs
			(all measurements are in ug/l)				
D. Dahlman	T10	08/10/89	ND	ND	ND	ND	ND
G. Dahlman	T10A	08/10/89	ND	ND	ND	ND	ND
J. King	T11	08/14/89	13.0	1.0	ND	ND	14.0
R. Lewis	T12	08/10/89	24.0	8.0	ND	ND	32.0
Wilson	T14	08/10/89	4.0	ND	ND	ND	4.0
C. Bush	T18	08/11/89	ND	ND	ND	ND	ND
B. Ieanno	T22	08/11/89	ND	ND	ND	ND	ND
Shafer	T25	08/10/89	ND	ND	ND	ND	ND
Linder	T30	08/10/89	ND	ND	ND	ND	ND
H. Busey	T31	08/10/89	ND	ND	ND	ND	ND
G. Echols	T35	08/11/89	ND	ND	ND	ND	ND
B.Schmidtlein	T39	08/10/89	ND	ND	ND	ND	ND
Chase	T41	08/10/89	ND	ND	ND	ND	ND
Riner	T42	08/10/89	ND	ND	ND	ND	ND
Crook	T43	08/10/89	ND	ND	21.0	60.0	81.0
Fisher	T46	08/16/89	ND	ND	ND	ND	ND
Moore	T47	08/16/89	ND	ND	ND	ND	ND
SFMW1	SFMW1	08/21/89	ND	ND	ND	ND	ND
SFMW2	SFMW2	08/21/89	ND	ND	ND	ND	ND
MW1	MW1	08/10/89	ND	ND	ND	ND	ND
MW1S	MW1S	08/10/89	ND	ND	ND	ND	ND
MW1D	MW1D	08/10/89	ND	ND	ND	ND	ND
MW2	MW2	08/09/89	ND	ND	ND	ND	ND
MW3	MW3	08/09/89	ND	ND	ND	ND	ND
MW4	MW4	08/09/89	ND	ND	ND	ND	ND
MW4A	MW4A	08/09/89	ND	ND	ND	ND	ND
MW5	MW5	08/10/89	ND	ND	ND	ND	ND
MW6	MW6	08/09/89	ND	ND	ND	ND	ND

TCE - Trichloroethylene
PCE - Tetrachloroethylene
* - Kansas Action Levels (KALs)
ACETN - Acetone
DMDS - Disulfide Dimethyl
ND - Not detected above detection limit

6.3 Soil Samples and Surface Water Samples

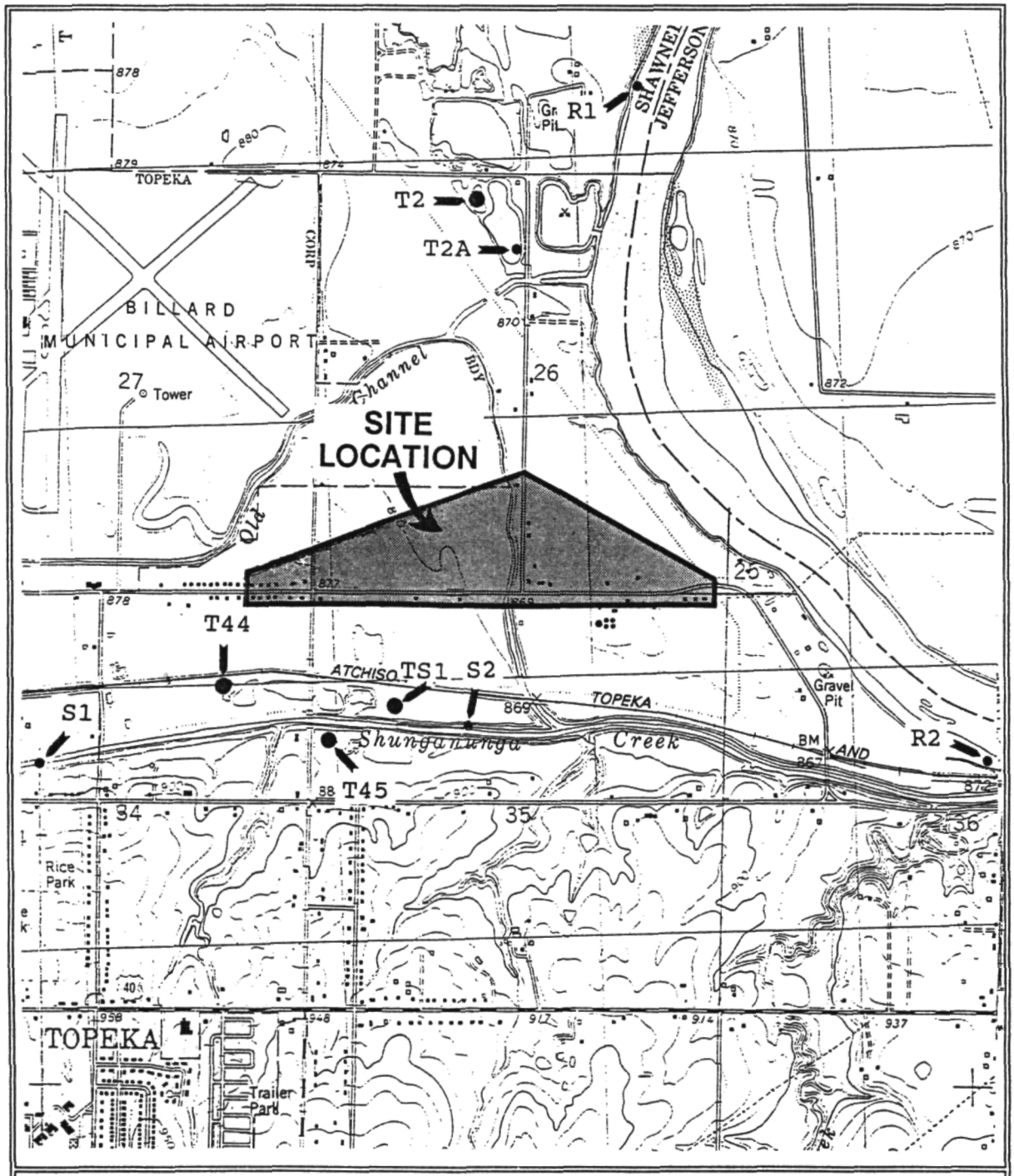
Soil samples were collected from four sample locations (Figure 11). In addition, five surface water samples were collected from the Kansas River, Shunganunga Creek, and a pond at a demolition landfill (Figure 11). Four of the surface water samples were collected both upstream and downstream of potential sources. All samples were analyzed for VOCs. No detectable levels of VOCs were indicated.

6.4 Challenger Products Soil and Waste Samples

Two waste samples were collected from the septic tank at Challenger Products and a total of five soil samples were collected near the septic tank, along the lateral lines of the septic tank and near a leaking drum (Figure 12). The soil samples indicated no VOC contamination. The septic tank samples were collected from the bottom and the top of the tank (Figure 12 Sample Identification Numbers: C1 and C2). Results of the analyses are listed in Table 9 and as indicated, both hydrocarbons and chlorinated solvents were detected in the samples collected from the septic tank.

Table 9
Challenger Products
Waste Stream Analyses

VOC	Sample Location: Septic Tank	
	Surface	Bottom
	(ug/l)	
Dichloromethane	9.1	ND
1,1-Dichloroethane	0.8	ND
Trans &/or Cis - 1,2-Dichloroethylene	76.6	2,610.0
Trichloromethane	10.1	ND
Bromodichloromethane	1.5	ND
Trichloroethylene	7.4	ND
Benzene	38.4	ND
Tetrachloroethylene	84.1	ND
Toluene	5.2	26.2
Chlorobenzene	7.1	144.0
1,4-dichlorobenzene	ND	182.0



1 INCH = 2012 FEET

SCALE

N

FIGURE 11 - SOIL AND SURFACE WATER SAMPLE LOCATIONS

LEGEND

- Surface water sample
- Soil sample

SOURCE: USGS 7.5' GRANTVILLE & TOPEKA QUADS., 1983

KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE
OCTOBER 1989

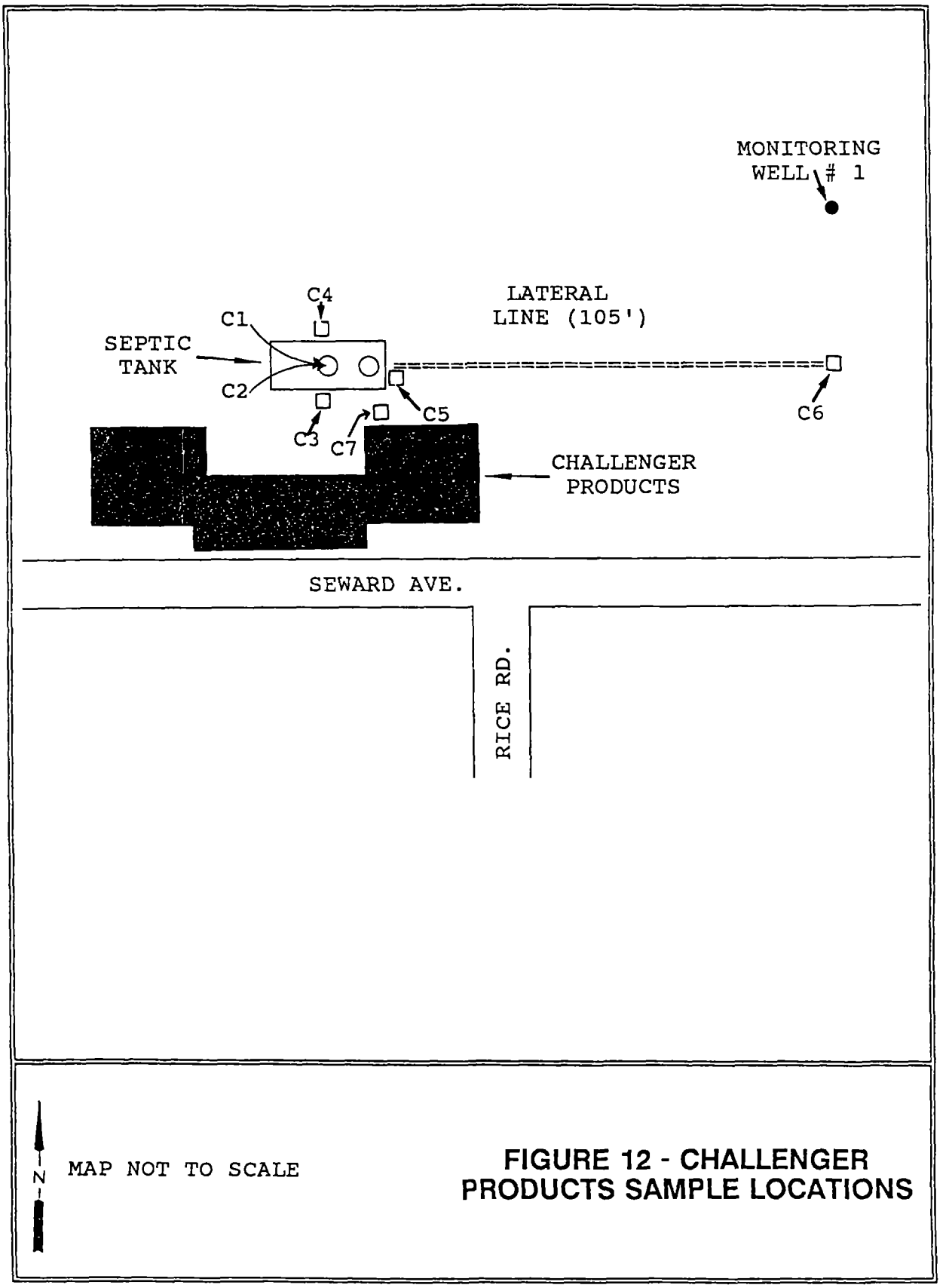


FIGURE 12 - CHALLENGER PRODUCTS SAMPLE LOCATIONS

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OCTOBER 1989

7.0 SUMMARY

In January 1987, citizens in the vicinity of the site complained of foul taste and odors in their drinking water. The KDHE subsequently tested several private wells in the area and found VOCs in some of the private wells. The levels detected at some sample locations were above current safe drinking water standards. Consequently, the KDHE advised all well owners in the vicinity of the site to seek an alternate source of drinking water.

Due to the contamination detected, water lines from the city of Topeka were extended to include all residents within the site and most residents within the site vicinity. However, connection to the lines is not mandatory and residents are required to pay for the connections and to share the cost of the construction of the main line.

The KDHE initiated an investigation in January 1987 to determine the source(s) for the contamination. Part of the investigation included conducting several RCRA hazardous waste compliance inspections at several facilities in the vicinity. In addition, an investigation of the Champney landfill was conducted after the KDHE was informed that the landfill operators discharged oil into the landfill. Consequently, Mr. Champney was fined for unlawful disposal of oil and ordered to install monitoring wells. Although monitoring wells were installed at the landfill, no VOC levels above the drinking water standards have been detected. The RCRA inspections and landfill investigation did not indicate any obvious sources for the contamination.

In 1988, the KDHE drilled numerous monitoring wells both upgradient and downgradient of the site at shallow and deep depths. Results of sampling indicated no VOC levels above current drinking water standards and no obvious sources for the contamination.

During the 1989 site reconnaissance several private wells, all monitoring wells, and soils and wastes at a nearby facility were sampled and tested for VOCs. Analytical results of the private well samples were similar to the results obtained during the 1987 and 1988 investigation. The levels detected in two of the wells exceeded current safe drinking water standards.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results of groundwater samples collected from wells at the site indicate that the VOC contamination is limited to a relatively isolated area within the site boundaries. The levels detected in some samples exceed the current safe drinking water standards. Private well samples collected in 1987 show the contamination was more widespread than in 1989. These results may be influenced by several factors such as groundwater levels due to seasonal changes, less extensive use of the groundwater, dilution of the contaminants, and/or downward movement of the contaminants.

The majority of the residents located within the site are now connected to city water and may only use their wells for irrigation; therefore, there is less water being withdrawn from the aquifer. The major types of contaminants detected generally are heavier than water and in high concentrations tend to migrate or sink towards the bottom of the aquifer. If wells in the area are not continuously pumped, the contaminants may have migrated into the lower part of the aquifer.

Drilling logs are not available for all private wells. However, a survey of private well owners indicates that the majority of the wells are drilled to a depth of approximately 30 to 50 feet. The deepest private well is 80 feet. Monitoring wells drilled by the KDHE in the site vicinity indicate that bedrock ranges from 65 to 70 feet. The deepest private well has shown the highest levels of trichloroethylene and tetrachloroethylene. This may indicate that the well is located very near a source and/or the contaminants have migrated to bedrock.

Samples collected from monitoring wells drilled in the vicinity of the site did not reveal any obvious sources for the contamination. Several VOCs, including trichloroethylene and tetrachloroethylene, were detected in samples collected from the septic tank at Challenger Products, Incorporated. Although the VOCs of concern were detected in the septic tank, no VOCs were detected in either the soils near the septic tank or along the lateral lines. Deeper testing of the soils in this area may indicate differently. The monitoring well drilled on Challenger's property did not reveal any significant levels of VOCs; however, the well was drilled and screened at bedrock. If this area is a source for the contamination, the contamination may not have migrated to bedrock and therefore may remain at shallower depths.

Monitoring wells drilled at Champney landfill also did not reveal any VOCs. In addition, no VOCs were detected in soil samples collected on the landfill property. Although no

contamination has been detected at the landfill, it is possible that contamination may have moved offsite and is no longer detectable at the landfill.

All residents within the site boundary have been provided with the option of obtaining an alternate source of water. Based on analytical data from 1987, 1988, and 1989, the levels of contamination do not appear to be increasing. The past and present use of land in the area provides for numerous potential sources for the contamination and it is possible that there is more than one source for the contamination.

Although the preliminary and projected Hazardous Ranking System (HRS) scores for the Croco Road Site are above the minimum required for further investigation under the Superfund program, the level of the contamination detected does not present an imminent threat to the environment or to those individuals in the area because an alternate source of water has been provided and the levels detected appear to be decreasing. Based on this no further action under the Superfund program is warranted at this time.

Although the site had been recommended for No Further Action (NFA) under Superfund, the following recommendations should be implemented.

1) All of the monitoring wells and contaminated private wells should be sampled and tested yearly. If the levels show a significant increase then further investigation may be warranted.

2) Challenger Products, Incorporated should be reinspected for RCRA hazardous waste compliance. During past inspections, the KDHE recommended that the facility connect to the city sewer and to discontinue discharging hazardous substance into the septic tank. In addition, it was strongly recommended that they initiate proper chemical handling procedures. During the 1989 investigation, hazardous substances were detected in the septic tank and a deteriorated drum of unknown substance was found on the facility property. Stronger enforcement may be warranted.

3) The landfills in the area should be closely monitored to assure they are complying with all county and state regulations. In addition, all unpermitted landfills should be closed or proper permits obtained.

4) Conduct periodic RCRA hazardous waste compliance inspections of facilities located at Billard Airport.

5) The KDHE should recommend that all residents within the site connect to city water.

No ongoing sources for the contamination were found during the investigation; however, routine inspections at all facilities in the area will help alleviate potential ongoing sources.

9.0 PRELIMINARY ASSESSMENT AND SITE INSPECTION FORMS

EPA requires that a Preliminary Assessment Form and Site Inspection Report form be completed for all sites being considered for National Priority Listing (NPL). The completed forms are in Appendix 2. The information from these forms is used to determine if a site warrants further investigation under Superfund. A site is recommended for further investigation if, during the investigation, it is determined that contamination at the site presents an imminent danger to the health of those living near the site and/or the environment and/or if it meets the minimum scoring requirements using the Hazardous Ranking System (HRS).

The HRS is a national ranking system designed to evaluate the relative potential of uncontrolled hazardous waste site facilities to cause human health or safety problems or ecological or environmental damage. The HRS score and remedial recommendations are used to determine if a site warrants a federally mandated cleanup. The HRS score cannot be released to the public until final approval from EPA has been granted. For this site, a preliminary and projected HRS score were calculated.

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T2 Landfill
Belmont & Kincaid

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH310

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0708

Sample wt/vol: 5. (g/mL) G Lab File ID: C8453

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 25. Date Analyzed: 8/25/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	51.	B
67-64-1	Acetone	16.	B
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
1330-20-7	Xylene (total)	7.	U

T2 Landfill Belmont & Kincaid

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH310

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0708

Sample wt/vol: 5. (g/mL) G Lab File ID: C8453

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 25. Date Analyzed: 8/25/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN HYDROCARBON	17.54	7.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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28.					
29.					
30.					

TS1 SOIL1 Landfill
313 Croco Rd.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH334

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0732

Sample wt/vol: 5. (g/mL) G Lab File ID: C8507

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 17. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	32.	B
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

TSi Soil Landfill 313 Creek Rd.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH334

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0732

Sample wt/vol: 5. (g/mL) G Lab File ID: C8507

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 17. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-trichloro-1,2,2	10.96	6.	J
2.	- -	UNKNOWN HYDROCARBON	17.55	8.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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26.					
27.					
28.					
29.					
30.					

T2A Dump landfill Belmont & Kincaid

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH313

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0711

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8257

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Dump landfill
T2A EPA SAMPLE NO.
Belmont & Kincaid

GH313

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0711

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8257

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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27.					
28.					
29.					
30.					

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN
Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number: 0005010C
Report Date: 8-23-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00NESENW331116E
Sample Type: WATER
Collection Site: 04089065/MW1 SANTA FE TOPEKA SN CO.
Collected By: COOPER
Date: 8-21-89
Time: 1152

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L)	Detection Limit (UG/L)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE RLP

Roger H. Carlson, Ph.D., Director

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN
Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number: 0005000C
Report Date: 8-22-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00SENWNE331116E Sample Type: WATER
Collection Site: 04089065/MW2 ARMCO TOPEKA SN CO.
Collected By: COOPER Date: 8-21-89 Time: 1100

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L)	Detection Limit (UG/L)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE

Roger H. Carlson, Ph.D., Director

S1
Shungaruna Creek

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH330

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0728

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8361

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	11.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

TIH

4045 NE Seward

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH336

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0734

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8306

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/24/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	4.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

TII
532 NE Kincaid

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH316

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0714

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8304

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/24/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	1.	J
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	13.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	1.	J
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

J = estimated value

B = possible lab contam

T11
532 NE Kincaid

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH316

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0714

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8304

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/24/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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23.					
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26.					
27.					
28.					
29.					
30.					

T12
520 NE Kincaid

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH337

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0735

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8354

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	12.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	24.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	8.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T43
3532 2nd

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH309

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0707

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8255

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	21.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T43
3532 2nd

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH309

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0707

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8255

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	624-92-0	Disulfide, dimethyl (9CI)	14.80	60.	J
2.	- -	UNKNOWN	5.82	6.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
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18.					
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28.					
29.					
30.					

MWID

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH319

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0717

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8355

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	9.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

Wash Water (Field Blank)

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH335

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0733

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8264

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

MW5

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH325

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0723

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8356

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	13.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

MW1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH318

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0716

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8261

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

MW1

EPA SAMPLE NO.

GH318

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0716

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8261

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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17.					
18.					
19.					
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22.					
23.					
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26.					
27.					
28.					
29.					
30.					

T45 Dump 2 landfill
Shunjamunga Creek & Crec Rd.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH314

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0712

Sample wt/vol: 5. (g/mL) G Lab File ID: C8502

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 28. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	49.	B
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	14.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
1330-20-7	Xylene (total)	7.	U

T45 Dump 2 landfill Shunganunga Creek & Crane Rd

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH314

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0712

Sample wt/vol: 5. (g/mL) G Lab File ID: C8502

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 28. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN HYDROCARBON	17.55	10.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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15.					
16.					
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18.					
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26.					
27.					
28.					
29.					
30.					

RI
Kareas River

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH327

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0725

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8358

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	12.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

R2
Kansas River

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH328

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0728

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8359

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	9.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

52
Shunganunga Creek

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH331

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0729

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8305

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/24/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T44 landfill Crecc Rd.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH305

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0703

Sample wt/vol: 5. (g/mL) G Lab File ID: C8454

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 14. Date Analyzed: 8/25/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	40.	B
67-64-1	Acetone	13.	B
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

T44 Landfill Croc. Rd.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH305

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0703

Sample wt/vol: 5. (g/mL) G Lab File ID: C8454

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 14. Date Analyzed: 8/25/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	75-69-4	Methane, trichlorofluoro- (8	7.47	6.	J
2.					
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10.					
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MW2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH321

ıb Name: RECMD Contract: 68W80051

ıb Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

ıtrix: (soil/water) WATER Lab Sample ID: AW0719

ımple wt/vol: 5. (g/mL) ML Lab File ID: C8351

ɛvel: (low/med) LOW Date Received: 8/18/89

Moisture: not dec.100. Date Analyzed: 8/23/89

ɔlumn: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	11.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

MW4A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH324

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0722

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8316

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	12.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

MW4

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH323

ab Name: RECMD Contract: 68W80051

ab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

atrix: (soil/water) WATER Lab Sample ID: AW0721

ample wt/vol: 5. (g/mL) ML Lab File ID: C8315

evel: (low/med) LOW Date Received: 8/18/89

Moisture: not dec.100. Date Analyzed: 8/22/89

olumn: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	13.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

MW1S

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

GH320

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0718

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8312

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	17.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW1S
EPA SAMPLE NO.

GH320

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0718

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8312

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN HYDROCARBON	13.59	6.	J
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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GH304

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0702

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8254

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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30.					

MW6

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH326

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0724

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8357

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	12.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	2.	J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN
Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number: 0004460C
Report Date: 8-18-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00SWSWSE231116E #47 Sample Type: WATER
Collection Site: 04089065 TOPEKA/MOORE CURTIS MOORE, 1206 NE KINCAID (SN CO)
Collected By: LARSEN/COOPER Date: 8-16-89 Time: 0905

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L)	Detection Limit (UG/L)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE RLP

Roger H. Carlson, Ph.D., Director

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN
Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number: 000447OC
Report Date: 8-18-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00NWSWNW341116E #46 Sample Type: WATER
Collection Site: 04089065 TOPEKA/FISHER ALMA FISHER, 3321 BATES (SN CO.)
Collected By: LARSEN/COOPER Date: 8-16-89 Time: 1006

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L)	Detection Limit (UG/L)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE RLP

Roger H. Carlson, Ph.D., Director

1AW3

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

GH322

ab Name: RECMD Contract: 68W80051

b Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

atrix: (soil/water) WATER Lab Sample ID: AW0720

ample wt/vol: 5. (g/mL) ML Lab File ID: C8314

vel: (low/med) LOW Date Received: 8/18/89

Moisture: not dec.100. Date Analyzed: 8/22/89

olumn: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	8.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	2.	J
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

GH304

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12560 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0702

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8254

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T18

5000 NE Seward

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH307

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0705

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8212

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	8.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T18
5000 NE Seward

1E

EPA SAMPLE NO.

GH307

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0705

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8212

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	NO SIGNIFICANT PEAKS PRESENT			
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T41
301 Norwood

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH308

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0706

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8213

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	7.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T41
301 Norwood

1E

EPA SAMPLE NO.

GH308

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0706

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8213

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH315

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0713

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8258

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T35
225 Norwood

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH315

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0713

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8258

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
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T42
200 Norwood

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH329

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0727

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8551

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/27/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	8.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T39
3213 NE Seward

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH332

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0730

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8262

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

130
3732 NE Seward

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH317

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0715

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8260

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T30
3732 NE Seward

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH317

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0715

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8260

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		NO SIGNIFICANT PEAKS PRESENT			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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17.					
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19.					
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21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

T25
300 Norwood

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH333

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: ... SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0731

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8263

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T22

3730 NE Seward

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH338

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0736

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8307

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/24/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T31
125 Rice Rd.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH306

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0704

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8211

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	7.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

T31
125 Rec'd

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GH306

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0704

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8211

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN AROMATIC	29.05	60.	J
2.					
3.					
4.					
5.					
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29.					
30.					

T10A
4105 NE Seward

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH312

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0710

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8311

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	19.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

J = estimated value

B = probable lab contaminant

T10
3843 NE Seward

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GH311

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0709

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8256

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	1.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

J = estimated value

B = probable contam.

Preliminary Assessment

Croco Road Site

Topeka, Kansas
Shawnee County

KSD984967547

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [X] OBSERVED (DATE: 01/87) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489
04 NARRATIVE DESCRIPTION

VOCs have been detected in the groundwater. Trichloroethylene and tetrachloroethylene have been detected at levels in excess of safe drinking water standards.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

None known

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE:) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

None known

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

None

01 [X] E. DIRECT CONTACT — 02 [X] OBSERVED (DATE: 01/87) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489
04 NARRATIVE DESCRIPTION

Consumption of contaminated water may cause long-term health risks.

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE:) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: (Acres)
04 NARRATIVE DESCRIPTION

None known

01 [X] G. DRINKING WATER CONTAMINATION — 02 [X] OBSERVED (DATE: 01/87) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489
04 NARRATIVE DESCRIPTION

Groundwater is used as a drinking water source in the area.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

None known

01 [X] I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489
04 NARRATIVE DESCRIPTION

Consumption of contaminated water may cause long-term health risks.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: KS | 02 SITE NUMBER: D984967547

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☒ OBSERVED (DATE: 10/25/89) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Areas of distressed vegetation have been observed at a chemical repackaging facility (Challenger Products, Inc.) located near the site.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
None observed

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 10/25/89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
A leaking drum of unknown substance was observed at a chemical repackaging company located near the site; however, no contamination was detected in soil samples collected from the area around the drum.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 4/23/87) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION Evidence of illegal dumping of oil at a nearby permitted demolition landfill (Champney Landfill).

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
Numerous permitted and unpermitted landfills are located in the vicinity of the site.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 9,489

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-13
July, 1981

EPA

Potential Hazardous Waste Site

Site Inspection Report

Croco Road Site

Topeka, Kansas
Shawnee County

KSD984967547

Site Inspection Report

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION
01 STATE: KS | 02 SITE NUMBER: KSD984967547

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Croco Road Site	Croco Road and Seward Avenue				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Topeka	Ks		Shawnee	89	

09 COORDINATES: LATITUDE 39° 04' 22" | LONGITUDE 95° 36' 39"

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
08/10/89 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	_____ (BEGINNING YEAR) _____ (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Lisa Larsen	Environmental Geologist	KDHE/BER	(913) 296-1666
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Danny Cooper	Environmental Technician III	KDHE/BER	(913) 296-1674
Shannon Huffman	Environmental Technician II	KDHE/BER	(913) 296-1674
John Cregan	Environmental Technician IV	KDHE/BER	(913) 296-1682
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
George Champney	Champney Landfill Owner	3224 Seward, Topeka	(913) 234-4869
Jim Ewart	Asst. Engineer -Envion.	Atchison-Topeka & Santa Fe Railroad-P.O.Box 1738-Topeka	(913) 357-2841
Nancy Zin	Office Manager	Challenger Products Inc./Chemco 3500NE Seward Ave.-Topeka	(913) 234-0492
Greg Hoefer	Owner	R & B Aircraft Repair Billard Airport	(913) 357-7751
Steve Boyles		Meisinger Beechcraft Billard Airport	(913) 235-6256
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	8:00 AM	warm, sunny, calm

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Lisa Larsen	KDHE/BER	(913) 296-1666

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Lisa Larsen	KDHE	BER	(913)296-1666	11/15/89 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D98496754 7

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D PERSISTENT
- ☐ E SOLUBLE
- ☐ F INFECTIOUS
- ☐ G FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Trichloroethylene	79-01-6	In groundwater	31.6	ug/l
SOL	Tetrachloroethylene	127-18-4	In groundwater	12.8	ug/l
SOL	Trans and/or cis 1,2-dichloroethylene	156-60-5	In groundwater	1.0	ug/l
SOL	Trichloromethane	67663	In groundwater	7.3	ug/l
SOL	1,2-Dichloroethane	107-06-2	In groundwater		ug/l
SOL	1,1,1-Trichloroethane	71-55-6	In groundwater		ug/l
SOL	1,2 and/or 1,4-Dichloro-benzene	95-50-1	In groundwater	2.0	ug/l
		106-46-7	-	-	-
SOL	Acetone	67-64-1	In groundwater	21.0	ug/l
SOL	Disulfide dimethyl		In groundwater	60.0	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation, files.

EPA FORM 2070-13(7 81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS	D984967547

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 9,489
02 [X] OBSERVED (DATE 01/87) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
VOCs have been detected in the groundwater. Trichloroethylene and tetrachloroethylene have been detected at levels in excess of the safe drinking water standards.

01 ☐ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None

01 [X] E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: 9,489
02 [X] OBSERVED (DATE: 01/87) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Consumption of contaminated water may cause long term health risks.

01 ☐ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: _____ (Acres)
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known

01 [X] G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 9,489
02 [X] OBSERVED (DATE: 01/87) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Groundwater is used as a source of drinking water by some of the people in the area.

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known

01 [X] I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: 9,489
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Consumption of contaminated water may cause long term health risks.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: KS | 02 SITE NUMBER: D984967547

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 [X] OBSERVED (DATE: 10/25/89) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Areas of distressed vegetation have been observed at a chemical repackaging facility located near the site.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None observed

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known

01 [X] M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 [X] OBSERVED (DATE: 10/25/89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489
04 NARRATIVE DESCRIPTION
A leaking drum of unknown substance was observed at a chemical repackaging company in the area; however, no contamination was detected in soil samples collected from the area around the drum.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None

01 ☐ O CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known

01 [X] P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION Evidence of illegal/unauthorized dumping of oil by an area landfill exists. Allegations of illegal/unauthorized dumping of hazardous substances by other PRPs exist.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 9,489

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☒ G. STATE (Specify) Landfill	453	3/9/84		Crump Landfill
☐ H. LOCAL (Specify)	172	5/7/76	6/30/89	Ables Landfill
☐ I. OTHER (Specify)	176,350			Champney Landfill
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE

~ 147.5 (Acres)

07 COMMENTS

The site area is predominantly residential with a few businesses located in the central portion. Several landfills, some of which are permitted by KDHE, are located in the vicinity of the site. A chemical repackaging company is located approximately one-half mile west of the site. Northwest of the site is the municipal airport.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Deteriorated drums (one leaking,10/25/89) of unknown substances have been observed on the chemical repackaging facility grounds.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☐ NO

02 COMMENTS

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☐	A. ☐	B. ☐	C. ☐	A. _____ (mi)
NON-COMMUNITY	C. ☐	D. ☒	D. ☐	E. ☒	F. ☐	B. 0 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL
9,489	1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~ 20 (ft)	east-northeast	~ 20 (ft)	_____ (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Private wells provide the only source of drinking water for several rural residents in the vicinity of the site and three Rural Water Districts. The total depth of private wells in the area range from 30' to 50'.

10 RECHARGE AREA	COMMENTS	11 DISCHARGE AREA	COMMENTS
☐ YES ☐ NO	Due to seasonal variations, both the Kansas River and Shungan-unga Creek are considered effluent or influent.	☐ YES ☒ NO	

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Kansas river	☐	.25 (mi)
Shunganunga Creek	☐	.5 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 5,000 NO OF PERSONS	B. ~ 15,000 NO OF PERSONS	C. ~30,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
~ 600	.1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located just northeast of the Topeka city limits in a predominantly residential area. Some small businesses are located in the central portion of the site. Agricultural land is interspersed among residences and businesses.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: KS | 02 SITE NUMBER: D984967547

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)
Sand, Gravel
☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)
Shale
☒ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
65-70 (ft)	(ft)		

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
~ -14 (in)	2.5-3.0 (in)	%	east-northeast (slight)	%

09 FLOOD POTENTIAL
SITE IS IN _____ YEAR FLOODPLAIN

10
☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. 5 (mi)	B. 5 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
NA (mi)
ENDANGERED SPECIES. _____

13 LAND USE IN VICINITY
DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 0 (mi)	B. 0 (mi)	C. 0 (mi)	D. 0 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located in the Kansas River floodplain with little slope in relation to surrounding topography.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation
KDHE - Drilling logs

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS	D984967547

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	38	Analysis completed by KDHE labs	
SURFACE WATER	5		
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	9		
VEGETATION			
OTHER sludge/septic tank	2		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Static Water Levels(swls)	SWls taken on all monitoring wells and some private wells.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Lisa Larsen - KDHE
(Name of organization or individual)

03 MAPS
☒ YES
☐ NO

04 LOCATION OF MAPS
KDHE - Lisa Larsen

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

KDHE - Bureau of Environmental Remediation
KDHE - Bureau of Air and Waste Management

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS	D984967547

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

February/April 1987 - KDHE conducted RCRA inspections at facilities and landfills in vicinity of the site.

March, 1987 - KDHE instructed Champney Landfills to conduct a groundwater monitoring program for Croco Rd. Landfill (313 Croco).

April 30, 1987 - KDHE issued a health advisory for all private well users in the vicinity of the site.

April 23, 1987
June 26, 1987
January 4, 1988 - KDHE directed a PRP (Challenger Products, Inc.) to discontinue the disposal of chemicals into its septic tank and to identify the contents of all containers and drums on facility property.

May 1, 1987 - Unlawful disposal of oil at Croco Rd. landfill. Permit expired 6/30/82. Champney fined $500 for assisting in oil dump.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

KDHE - Bureau of Air and Waste Management

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS	D984967547

II. CURRENT OWNER(S)				PARENT COMPANY *(if applicable)*			
01 NAME: Unknown		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE		10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE		10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE		10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE		10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	

III. PREVIOUS OWNER(S) *(List most recent first)*			IV. REALTY OWNER(S) *(If applicable; list most recent first)*		
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS	D984967547

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P O Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE / 07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P O Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P O Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e g , state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Not known

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Not known

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Not known

01 ☒ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Alleged illegal/unauthorized dumping of wastes by PRPs.

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NOne

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Croco Road Site	Croco Road and Seward Avenue

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Topeka	Ks		Shawnee	89	

09 COORDINATES LATITUDE	LONGITUDE
39° 04' 22".	95° 36' 39".

10 DIRECTIONS TO SITE (Starting from nearest public road)

Interstate 70 west to Topeka. East Topeka interchange (Interstate 70) to 10th Street. East on 10th Street to Croco Road. North on Croco Road to Seward Avenue.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Unknown	

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
			( )

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Unknown	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)

☐ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER: _____ (Specify) ☒ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES ☐ NO DATE 8 10 89 (MONTH DAY YEAR)

BY (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)

☐ A. ACTIVE ☐ B. INACTIVE ☒ C. UNKNOWN

03 YEARS OF OPERATION

_____ (BEGINNING YEAR) _____ (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED VOCs (tetrachloroethylene, trichloroethylene, 1,2-dichloroethylene, trichloromethane, 1,2-dichloroethane, 1,2 and/or 1,4-dichlorobenzene, acetone, and disulfide dimethyl) have been detected in the groundwater. The levels of some of the VOCs exceed the state safe drinking water standards.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Water mains from the City of Topeka extend into the area giving the majority of the people the option to connect to city water. However, private wells are the only source of drinking water for some people in the area. Health risks exist for long-term exposure to water contaminated with excessive levels of VOCs.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Lisa Larsen	KDHE/BER	(913) 296-1666

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Lisa Larsen	KDHE	BER	(913) 296-1666	11/15/89 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D984967547

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Trichloroethylene	79-01-6	In groundwater	31.6	ug/l
SOL	Tetrachloroethylene	127-18-4	In groundwater	12.8	ug/l
SOL	Trans and/or Cis 1,2-dichloroethylene	156-60-5	In groundwater	1.0	ug/l
SOL	Trichloromethane	67663	In groundwater	7.3	ug/l
SOL	1,2-Dichloroethane	107-06-2	In groundwater		ug/l
SOL	1,2 and/or 1,4-Dichloro-benzene	95-50-1,	In groundwater	2.0	ug/l
		106-46-7	-	-	-
SOL	Acetone	67-64-1	In groundwater	21.0	ug/l
SOL	1,1,1-Trichloroethane	71-55-6	In groundwater	1.2	ug/l
SOL	Disulfide dimethyl		In groundwater	60.0	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation, files.